To the Director of the U.S. Patent and 102994	ease record the attached documents or the new address(es) be
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Dr. D. Floriss, Dr. P. Florissi, Udi Kleers, Dr. S. Kliger,	Name: EMC Corporation
Dr. E. Yardeni and Dr. Y. Yemini	Internal Address:
Additional name(s) of conveying party(ies) attached?	No 2 20
3. Nature of conveyance/Execution Date(s): Execution Date(s) <u>3/31/; 4/21/; 3/31/; 3/31/, 3/31;4/19/05</u>	Street Address: 176 South Street
Assignment Merger	No Street Address: 176 South Street
	City: Hopkinton
Security Agreement Change of Name	12
Government Interest Assignment	State: <u>Ma</u>
Executive Order 9424, Confirmatory License	Country: USA Zip:01748
Other	
	Additional name(s) & address(es) attached? Yes
4. Application or patent number(s): Th A. Patent Application No.(s)	is document is being filed together with a new appli- B. Patent No.(s)
5. Name and address to whom correspondence	attached? Yes INo 6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed:	
5. Name and address to whom correspondence	6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Carl A. Giordano</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Carl A. Giordano</u>	6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accourt Enclosed
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Carl A. Giordano</u> Internal Address: <u>EMC Corporation</u>	6. Total number of applications and patents involved:_1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit accourt
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Carl A. Giordano</u> Internal Address: <u>EMC Corporation</u>	6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accourt Enclosed
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address:EMC Corporation Street Address:44 South Broadway, 7th Fir.	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accourt Enclosed None required (government interest not affection 8. Payment Information a. Credit Card Last 4 Numbers
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address: EMC Corporation Street Address: 44 South Broadway, 7th Flr. City: White Plains State: NY	6. Total number of applications and patents involved:_1
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address:EMC Corporation Street Address:44 South Broadway, 7th Flr. City: White Plains State:NY Zip:10601 Phone Number:914 798 8505	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accourt Enclosed None required (government interest not affection 8. Payment Information a. Credit Card Last 4 Numbers
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address: EMC Corporation Street Address: 44 South Broadway, 7th Fir. City: White Plains State: NY Zip:10601 Phone Number: 914 798 8505 Fax Number: 914 948 6270	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accour Enclosed None required (government interest not affecti 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address:EMC Corporation Street Address: 44 South Broadway, 7th Flr. City: White Plains State:NY Zip:10601 Phone Number: 914 798 8505 Fax Number: 914 948 6270 Email Address: giordano carl@emc.com	6. Total number of applications and patents involved:_1
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address:EMC Corporation Street Address: 44 South Broadway, 7th Fir. City: White Plains State: NY Zip:10601 Phone Number: 914 798 8505 Fax Number: 914 948 6270 Email Address: giordano carl@emc.com 9. Signature: Cutter Corporation	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accour Enclosed None required (government interest not affecti 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 05-0889 Authorized User Name Carl A. Giordano
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address: EMC Corporation Street Address: 44 South Broadway, 7th Fir. City: White Plains State: NY Zip:10601 Phone Number: 914 798 8505 Fax Number: 914 948 6270 Email Address: giordano carl@emc.com 9. Signature: Signature	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accour Enclosed None required (government interest not affecti 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 05-0889 Authorized User Name Carl A. Giordano April 27, 2005 Date
5. Name and address to whom correspondence concerning document should be mailed: Name:Carl A. Giordano Internal Address:EMC Corporation Street Address: 44 South Broadway, 7th Fir. City: White Plains State: NY Zip:10601 Phone Number: 914 798 8505 Fax Number: 914 948 6270 Email Address: giordano carl@emc.com 9. Signature: Cutter Corporation	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card Authorized to be charged to deposit accour Enclosed None required (government interest not affecti 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number 05-0889 Authorized User Name Carl A. Giordano
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ASSIGNMENT

WHEREAS, we, Dr. Danilo Florissi, Dr. Patricia Gomes Soares Florissi, Udi Kleers, Dr. Shmuel Kliger, Dr. Eyal Yardeni and Dr. Yechiam Yemini 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 Determining Causality Mapping of Distributed Systems*, the specification of which:

- [] is being executed on even date herewith and is about to be filed in the United States Patent Office;
- [XX] was filed on March 11, 2005 as U.S. Application No. 11/077,932;
- [] was patented under U.S. Patent No. ______on_____.

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

Page 1 of 7

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:

Date:

3/31/2005

Danilo Horin-

Inventor's Signature

Print full name of first inventor:

Residence:

Citizenship:

Mailing Address:

11 Winterberry Lane, Briarcliff Manor, NY 10510 Brazil Same as above

STATE/COMMONWEALTH OF COUNTY OF W

ANILO FLORISSI

Danilo Florissi

Then personally appeared before me the above-named ______ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 3157 day of Meret _____, $200 \leq$.

Notary Public HOMAS MERCIANO Print Name: My Commission expires 3/11/2007

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Date:			
	Inventor's Signature		
Print full name of second inventor:	Patricia Gomes Soares Florissi		
Residence:	11 Winterberry Lane, Briarcliff Manor, NY 10510		
Citizenship:	Brazil		
Mailing Address:	Same as above		
STATE/COMMONWEALTH OF COUNTY OF			
Then personally appeared before me the above-named foregoing instrument as his/her free act and deed this _	and acknowledged that he/she executed the day of, 200		
	Notary Public		
	Print Name:		

.

My Commission expires __/ __/

Page 3 of 7

Date:

Inventor's Signature

Print full name of third inventor:

Residence:

Citizenship:

Mailing Address:

Udi Kleers

295 Nob Hill Drive, Elmsford, NY 10523 Israel Same as above

STATE/COMMONWEALTH OF COUNTY OF U

UDI KLEEKS Then personally appeared before me the above-named ______ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 2157, day of MARCH, 200 1.

Notary Public GENDINO HOMPS Print Names My Commission expires 3 / 17/ W

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Page 4 of 7

Inventor's Signature

Print full name of third inventor:

Residence:

Date:

Citizenship:

Mailing Address:

Shmuel Kliger

660 Quaker Road Chappaqua, NY. 10504 Same as above

STATE/COMMONWEALTH OF COUNTY OF

Then personally appeared before me the above-named $_$ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this $3i s_{\overline{1}}$ day of $_$ $_$ $_$ $_$ 200 <u>S</u>.

Notary Public MERDINNO HIM Print Name: My Commission expires $\frac{3}{1/1}$

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Date: 3/31/05

Inventor's Signature

Print full name of third inventor:

Residence:

Citizenship:

Mailing Address:

38 Eastern Drive, Ardsley, NY 10502 Israel Same as above

Eyal Yardeni

STATE/COMMONWEALTH OF Contación COUNTY OF

Then personally appeared before me the above-named $\underbrace{FYRL}_{and} \xrightarrow{YRL}_{and} \underbrace{FYRL}_{and} \underbrace{FYRL$

Notary Public I.HOMAS MERSNOW O Print Name: My Commission expires 3/11/07

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

-Page 6 of 7-

PATENT/Joint Assignment Attorney Docket No.: DistSyst-2 EMC Docket No.: _ Inventor's Signature

Print full name of third inventor:

4/19/2005

Yechiam Yemini

500 River Road, Apt. 2, Cos Cob, Conn. 06807 USA Same as above

Residence:

Date:

Citizenship:

Mailing Address:

STATE/COMMONWEALTH OF NEW YORK COUNTY OF MANHATTAN

and acknowledged that he/she executed the Then personally appeared before me the above-named foregoing instrument as his/her free act and deed this 19+5 day of APRIL, 2005.

Junia H. Well

Notary Public

Print Name: PATRICIA H. WELCH

My Commission expires 8 31 / 2006 PATRICIA H. WELCH Notary Public, State of New York No.01WE4812627 Qualified in Kings County Commission Expires August 31, 2006

--Page 7 of 7

ASSIGNMENT

WHEREAS, we, Dr. Danilo Florissi, Dr. Patricia Gomes Soares Florissi, Udi Kleers, Dr. Shmuel Kliger, Dr. Eyal Yardeni and Dr. Yechiam Yemini 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 Determining Causality Mapping of Distributed Systems*, the specification of which:

- [] is being executed on even date herewith and is about to be filed in the United States Patent Office;
- [XX] was filed on March 11, 2005 as U.S. Application No. 11/077,932;
- [] was patented under U.S. Patent No. ______on_____.

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 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:

Danilo Florissi

Date:

3/31/2005

Danilo Horin-

Inventor's Signature

Print full name of first inventor:

Residence:

Citizenship:

Mailing Address:

ь. н

11 Winterberry Lane, Briarcliff Manor, NY 10510BrazilSame as above

STATE/COMMONWEALTH OF NEW YORK COUNTY OF WESSERVESTER
DANILO FLOKISSI
Then personally appeared before me the above-named and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 3197 , day of Marcula, $200 \leq .$
Notary Public
Print Name: THENAS MELONDINO
Print Name: 1005 Merch Q. NO My Commission expires 3/ <u>1</u> / <u>2007</u>
THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Date: 2005

labucia ome Inventor's Signature

Print full name of second inventor:

Residence:

Citizenship:

Mailing Address:

41.31

Patricia Gomes Soares Florissi

11 Winterberry Lane, Briarcliff Manor, NY 10510 Brazil Same as above

STATE/COMMONWEALTH OF COUNTY OF

Then personally appeared before me the above-named $\frac{MU(1/haust)}{2450}$ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this $\frac{2450}{2450}$ day of MPU_{-} , 200 $\stackrel{<}{>}$.

Notary Public Print Name: [Homes March Di NO My Commission expires 3 / 17/ des ru 07

> THOMAS MERENDINO Notary Public, State of New York No. 01MESU89181 Qualified in Westchester County Commission Explies March 17, 2007

Page 3 of 7

udik

Inventor's Signature

Print full name of third inventor:

Udi Kleers

Residence:

Date:

Citizenship:

Mailing Address:

295 Nob Hill Drive, Elmsford, NY 10523 Israel Same as above

STATE/COMMONWEALTH OF TURIN COUNTY OF U

UDL KLEEKS Then personally appeared before me the above-named ______ and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 2157 day of MANEL _____, 200 1.

Notary Public

Magino HOMP Print Name 117 My Commission expires $\underline{3}$ WO

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Page 4 of 7

Inu

Inventor's Signature

Print full name of third inventor:

Residence:

Date:

Citizenship:

Mailing Address:

. .

660 Quaker Road

Shmuel Kliger

Chappaqua, NY. 10504 Same as above

STATE/COMMONWEALTH OF Estatestik COUNTY OF

Then personally appeared before me the above-named $\underbrace{SH_{MUN}}_{\text{and acknowledged that he/she executed the}}_{\text{foregoing instrument as his/her free act and deed this } \underbrace{SI_{MUN}}_{\text{day of } MNell}, 200 \underline{S}$.

Notary Public (Homas 1 alanno Print Name: My Commission expires <u>3</u> / リノ のつ

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

Page 5 of 7

Date: 3/31/05

nvenior's Signature

Print full name of third inventor:

Residence:

Citizenship:

Mailing Address:

Eyal Yardeni

38 Eastern Drive, Ardsley, NY 10502 Israel Same as above

STATE/COMMONWEALTH OF COUNTY OF

Notary Public HOMAS MERSIOND Print Name: 10 My Commission expires Δ

THOMAS MERENDINO Notary Public, State of New York No. 01ME6089181 Qualified in Westchester County Commission Expires March 17, 2007

-Page 6 of 7-

Date:		
	Inventor's Signature	
Print full name of third inventor:	Yechiam Yemini	
Residence:	500 River Road, Apt. 2,, Cos Cob, Conn. 06807	
Citizenship:	USA	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF COUNTY OF		
Then personally appeared before me the above-named foregoing instrument as his/her free act and deed this	and acknowledged that he/she executed the day of, 200	
	Notary Public	

Print Name: _	······································		
My Commissi	on expires	_//	

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