PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Stephen G. Graham	09/24/2008
Thomas Maguire	09/23/2008
Xiaotao Liu	09/24/2008

RECEIVING PARTY DATA

Name:	EMC Corporation
Street Address:	176 South Street
City:	Hopkinton
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12241829

CORRESPONDENCE DATA

Fax Number: (508)616-9661

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 508-616-9661

Email: judi.williams@chapin-ip-law.com

BARRY W. CHAPIN CHAPIN INTELLECTUAL PROP Correspondent Name:

WESTBOROUGH OFFICE PARK Address Line 1: Address Line 2: 1700 WEST PARK DRIVE, SUITE 280

WESTBOROUGH, MASSACHUSETTS 01581 Address Line 4:

ATTORNEY DOCKET NUMBER:	EMC08-15(08156)
NAME OF SUBMITTER:	Joshua D. Mather

Total Attachments: 12

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PATENT **REEL: 021609 FRAME: 0534**

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PATENT REEL: 021609 FRAME: 0535

ASSIGNMENT

WHEREAS, we, Stephen G. Graham, Thomas Maguire and Xiaotao Liu 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 FOR DYNAMICALLY GENERATING INFORMATION OBJECTS BASED ON A RESTFUL SUBSCRIPTION REQUEST, the specification of which:

[X]	States Patent Office;	rewith and is about to be filed in the United	1
[]	was filed on	as U.S. Application No;	
[]	was patented under U.S. Patent N	oon	

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

PATENT REEL: 021609 FRAME: 0536

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: $\frac{9/24/8}{}$	Hefter J John Signature	
	~	
Print full name of first inventor:	Stephen G. Graham	
Residence:	203 Parkside Circle, Chapel Hill, NC 27516	
Citizenship:	Canada	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OFCOUNTY OFC	Me Tonge	
On this		
deta for the purposes seem contained.		
	Souldon Ball Page	
	Notary Public	
	Print Name: Bothera Both Mycos	
	My Commission expires / 12/320	

<u>~</u>2,~

Date:	
	Inventor's Signature
Print full name of second inventor:	Thomas Maguire
Residence:	18 Coventry Lane, Brewster, NY 10509
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	
On this day of above-named evidence of identification [] employee	, 200X, then personally appeared before me the known to me through satisfactory identification card; [] driver's license; [] (other) to be the person whose name is subscribed to the
foregoing Assignment and acknowledge deed for the purposes therein contained.	d that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of third inventor:	Xiaotao Liu
Residence:	33 Merritt Avenue, White Plains, NY 10606
Citizenship:	People's Republic of China
Mailing Address:	Same as above
COLDITY	
On this day of above-named evidence of identification [] employee	, 200X, then personally appeared before me the known to me through satisfactory identification card; [] driver's license; [] (other) be the person whose name is subscribed to the
foregoing Assignment and acknowledged deed for the purposes therein contained.	that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires//

ASSIGNMENT

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[X]	is being executed on even date h States Patent Office;	erewith and is about to be filed in the United	
[]	was filed on	_ as U.S. Application No;	
[]	was patented under U.S. Patent 1	No	

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

PATENT REEL: 021609 FRAME: 0540

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:	
	Inventor's Signature
Print full name of first inventor:	Stephen G. Graham
Residence:	203 Parkside Circle, Chapel Hill, NC 27516
Citizenship:	Canada
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	
evidence of identification [] employee to	, 200X, then personally appeared before me the known to me through satisfactory identification card; [] driver's license; [] (other) to be the person whose name is subscribed to the d that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires//

Date: 9/28/38	_ Show My.
Print full name of second inventor: Residence: Citizenship: Mailing Address:	Thomas Maguire 18 Coventry Lane, Brewster, NY 10509 United States of America Same as above
STATE/COMMONWEALTH OF COUNTY OF	MASSACHUSETTS MIDDLESEX
On this 23 day of 35 PTEMBER 200% then personally appeared before me the above-named THOMAS MAGUIRE known to me through satisfactory exidence of identification [_] employee identification card; [_] driver's license; [_] (other) HERSONALLY KNOWN TO ME to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained. SANDRA A NULAGA Notary Public Commonwealth of Massachusetts My Commission expires	

Date:	
	Inventor's Signature
Print full name of third inventor:	Xiaotao Liu
Residence:	33 Merritt Avenue, White Plains, NY 10606
Citizenship:	People's Republic of China
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	
above-named	, 200X, then personally appeared before me the known to me through satisfactory eidentification card; [] driver's license; [] (other)
to	be the person whose name is subscribed to the d that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires / /

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No. 2321 P. 2

Sep. 24. 2008 1:07PM

PATENT/Joint Assignment Attorney Docket No.: EMC08-15(08156) EMC Docket No.: EMC-08-156

ASSIGNMENT

WHEREAS, we, Stephen G. Graham, Thomas Maguire and Xiaotao Liu 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 FOR DYNAMICALLY GENERATING INFORMATION OBJECTS BASED ON A RESTFUL SUBSCRIPTION REQUEST, the specification of which:

[X]	is being executed on even date h States Patent Office;	erewith and is about to be filed	in the United
[]	was filed on	_ as U.S. Application No	· · · · · · · · · · · · · · · · · · ·
[]	was patented under U.S. Patent I	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

PATENT

REEL: 021609 FRAME: 0544

Sep. 24. 2008 1:07PM

No. 2321 P. 3

PATENT/Joint Assignment Attorney Docket No.: EMC08-15(08156) EMC Docket No.: EMC-08-156

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:	
	Inventor's Signature
Print full name of first inventor:	Stephen G. Graham
Residence:	203 Parkside Circle, Chapel Hill, NC 27516
Citizenship:	Canada
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	
above-namedevidence of identification [] employee	, 200X, then personally appeared before me the known to me through satisfactory e identification card; [] driver's license; [] (other) to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires//

-2-

No. 2321 P. 4

Sep. 24. 2008 1:08PM

PATENT/Joint Assignment Attorney Docket No.: EMC08-15(08156) EMC Docket No.: EMC-08-156

Date:	
	Inventor's Signature
Print full name of second inventor:	Thomas Maguire
Residence:	18 Coventry Lane, Brewster, NY 10509
Citizenship:	United States of America
Mailing Address:	Same as above
	· ·
On this day of above-named evidence of identification [] employee	, 200X, then personally appeared before me the known to me through satisfactory identification card; [] driver's license; [] (other) to be the person whose name is subscribed to the
foregoing Assignment and acknowledge deed for the purposes therein contained.	d that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires//

Fax Station: CHAPIN#INTELLECTUAL#PROPERTY#LAW.#LLC

No. 2321

Sep. 24. 2008 1:08PM

PATENT/Joint Assignment Attorney Docket No.: EMC08-15(08156) EMC Docket No.: EMC-08-156

Date: Sep. 24, 2008

Inventor's Signature

Print full name of third inventor:

Xiaotao Liu

Residence:

33 Merritt Avenue, White Plains, NY 10606

Citizenship:

People's Republic of China

Mailing Address:

Same as above

STATE/COMMONWEALTH OF

COUNTY OF

On this 24 day of September, 200%, then personally appeared before me the known to me through satisfactory above-named Xigotas Liv evidence of identification [__] employee identification card; [__driver's license; [__] (other) to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

RIA NIEVES Notary P. Ouc - State of New York NO. 01NI6177292 Qualified in Bionx Cay Commission Explins

Print Name: Maria

My Commission expires 11 / 13/ 2011