PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
John M. Bent	08/06/2013
Sorin Faibish	07/10/2013
Uday Gupta	07/18/2013
James Pedone	07/10/2013
Tao Peng	07/18/2013

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:	13928985

CORRESPONDENCE DATA

Fax Number:

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

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Address Line 2: Ryan, Mason & Lewis, LLP
Address Line 4: Fairfield, CONNECTICUT 06824

ATTORNEY DOCKET NUMBER:	4414-288
NAME OF SUBMITTER:	Kevin M. Mason
	PATENT

502468998 REEL: 031067 FRAME: 0636

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Signature:	/Kevin M. Mason/
Date:	08/23/2013
Total Attachments: 7 source=4414-288_Assignment#page1.tif source=4414-288_Assignment#page2.tif source=4414-288_Assignment#page3.tif source=4414-288_Assignment#page4.tif source=4414-288_Assignment#page5.tif source=4414-288_Assignment#page6.tif source=4414-288_Assignment#page7.tif	

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(Rev.6-93)

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Total number of pages including cover s	sheet, attachments, and document:	
Reg. No. 36,597	Signature Date	
	M. Mason/ August 23, 2013	
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.		
DO NOT USE THIS SPACE		
City: Fairfield State: CT ZIP: 06824	8. Deposit account number 50-0762	
Internal Address: Ryan, Mason & Lewis, LLP Street Address: 1300 Post Road, Suite 205	X Authorized to be charged to deposit account	
Name: Kevin M. Mason	7. Total Fee (37 CFR 3.41) \$ <u>40.00</u> Enclosed	
correspondence concerning document should be mailed:	involved: 1	
5. Name and address of party to whom	6. Total number of applications and patents	
A. Patent Application No.(s) 13/928,985 Filed June 27, 2013 B. Patent No.(s) Additional numbers attached?Yes X No		
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is:		
Execution Date: 8/6/2013,7/10/2013, 7/18/2013, 7/10/2013, 7/18/2013		
3. Nature of conveyance: X Assignment Merger Security Agreement Change of Name Other	Street Address: 176 South Street City: Hopkinton State: MA ZIP: 01748 Additional name(s) & address(es) attached?Yes X_No	
Additional name(s) of conveying party(ies) attached? YesX_ No	Internal Address:	
John Bent, Sorin Faibish, Uday Gupta, James Pedone, Tao Peng	Name: EMC Corporation	
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)	
	Please record the attached original documents or copy thereof.	
Trademark Office		

Commissioner of Patents and Trademarks **Box Assignments** Washington, DC 20231 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, DC, 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, DC 20503.

EMC-13-0054

Mail documents to be recorded with required cover sheet information to:

PATENT REEL: 031067 FRAME: 0638

ASSIGNMENT

WHEREAS, we, John M. Bent, Sorin Faibish, Uday Gupta, James Pedone and Tao Peng, 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 CLUSTER FILE SYSTEM WITH A BURST BUFFER APPLIANCE FOR CONTROLLING MOVEMENT OF DATA AMONG STORAGE TIERS, 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 June 27, 2013 as U.S. Application No. 13/928,985;
[]	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:

Date: \$\lfloor \lfloor	Thirt	
1	Inventor's Signature	
Print full name of first inventor:	John M. Bent	
Residence:	Los Alamos, New Mexico	
Citizenship:	United States of America	
Mailing Address:	1902 Camino Durasnilla	
	Los Alamos, New Mexico 87544	
STATE/COMMONWEALTH OF	NM	
COUNTY OF	Los Alamos	
On this day of, 20 then personally appeared before me the above-named John M. Bent known to me through satisfactory 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.		
	Rehattrum	
	Notary Public	
	Print Name: R LYNN STRAUSS	
	My Commission expires $3/1/2017$	

Date: 7/10/2013	Fulid
	Inventor's Signature
Print full name of second inventor:	Sorin Faibish
Residence:	Newton, Massachusetts
Citizenship:	United States of America
Mailing Address:	11 Selwyn Road
	Newton, Massachusetts 02461
STATE/COMMONWEALTH OF COUNTY OF	Massachusetts Middlesex
employee identification card; [X] dr the person whose name is subscribed	, 20/3, then personally appeared before me the o me through satisfactory evidence of identification [] river's license; [] (other) to be to the foregoing Assignment and acknowledged that he/she and deed for the purposes therein contained.
	rotaly ruone
	Print Name: Linette S. Kelley
	My Commission expires <u>07</u> / <u>13</u> / <u>20</u> /6
	COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018

Date: 7/18/2-13	
7	Inventor's Signature
Print full name of third inventor:	Uday Gupta
Residence:	Westford, Massachusetts
Citizenship:	India
Mailing Address:	5 Indigo Lane
	Westford, MA 01886
STATE/COMMONWEALTH OF COUNTY OF	Massachusetts Middlesex
above-named Uday Gupta known to me employee identification card; [] drive to be the person whose name is subscrib	, 20_/3, then personally appeared before me the through satisfactory evidence of identification [X] r's license; [] (other) bed to the foregoing Assignment and acknowledged that act and deed for the purposes therein contained.
	Notary Public O. Delley
	Print Name: LineTte S. Relley My Commission expires 07/18/2018
	LINETTE'S. KELLEY Potary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018

Date: 7/10/13	Janes M Selec I
(Inventor's Signature
Print full name of second inventor:	James Pedone
Residence:	West Boylston, Massachusetts
Citizenship:	United States of America
Mailing Address:	1 Pheasant Hill Run
	West Boylston, Massachusetts 01583
STATE/COMMONWEALTH OF/	Massachusetts
COUNTY OF	Middlesex
employee identification card; [] driver's	foregoing Assignment and acknowledged that he/she
	Notary Public
	Print Name:
	LINETTE S. KELLEY Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018

Date:

July. 18. 2013

eng Tao

√Inventor's Signature

Print full name of second inventor:

Residence:

Citizenship:

Mailing Address:

Tao Peng

Beijing, China

People's Republic of China 6201 9th Building Wushengxili

Chaoyang District, Beijing, CHINA

(7.7°

Tang Haiting

Witness