

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Qin Xin</td> <td>02/17/2012</td> </tr> <tr> <td>Feng Zhang</td> <td>02/17/2012</td> </tr> <tr> <td>Qi Bao</td> <td>02/17/2012</td> </tr> </tbody> </table>		Name	Execution Date	Qin Xin	02/17/2012	Feng Zhang	02/17/2012	Qi Bao	02/17/2012
Name	Execution Date								
Qin Xin	02/17/2012								
Feng Zhang	02/17/2012								
Qi Bao	02/17/2012								
RECEIVING PARTY DATA									
Name:	EMC Corporation								
Street Address:	176 South Street								
City:	Hopkinton								
State/Country:	MASSACHUSETTS								
Postal Code:	01748								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13402324</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13402324				
Property Type	Number								
Application Number:	13402324								
CORRESPONDENCE DATA									
Fax Number:	(508)366-4688								
Phone:	508-616-2900								
Email:	Docket@BainwoodHuang.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Bainwood, Huang & Associates, LLC								
Address Line 1:	2 Connector Road								
Address Line 4:	Westborough, MASSACHUSETTS 01581								
ATTORNEY DOCKET NUMBER:	1003-136.001								
NAME OF SUBMITTER:	Bruce D. Rubenstein, Esq.								
<p>Total Attachments: 10          source=1003-136.001 - Executed Assignment Inv 1#page1.tif</p>									

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source=1003-136.001 - Executed Assignment Inv 2-3#page5.tif

## ASSIGNMENT

**WHEREAS**, we, Qin Xin, Feng Zhang and Qi Bao 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 **SELECTION OF ERASURE CODE PARAMETERS FOR NO DATA REPAIR** the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on \_\_\_\_\_ as U.S. Application No. \_\_\_\_\_;
- 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, USA 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;

**AND** we hereby authorize our attorneys Bainwood Huang & Associates LLC to insert here in parentheses ( 13/402,324 filed 02/22/2012 ) the application number and filing date of said Application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

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

Date: 2/17/2012

[Signature]  
Inventor's Signature

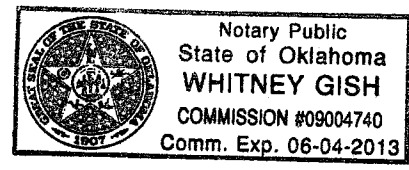
Print full name of first inventor: Qin Xin  
Residence: 323 N. Butternut Ave.  
Broken Arrow, OK 74012  
United States of America  
Citizenship: CN  
Mailing Address: Same as above

STATE/Commonwealth of Oklahoma  
COUNTY OF Tulsa

On this 17<sup>th</sup> day of February, 2012, then personally appeared before me the above-named **Qin Xin** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) Qin Xin 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.

[Signature]  
Notary Public

Print Name: Whitney Gish  
My Commission expires 6/4/13



Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of second inventor: Feng Zhang  
Residence: 40 Cider Hill Lane  
Sherborn, MA 01770  
United States of America  
Citizenship: US  
Mailing Address: Same as above

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2012, then personally appeared before me the above-named **Feng Zhang** 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.

\_\_\_\_\_  
Notary Public

Print Name:

\_\_\_\_\_  
My Commission expires \_\_\_ / \_\_\_ / \_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of third inventor: Qi Bao  
Residence: 228 Liberty Square Road  
Boxborough, MA 01719  
United States of America  
Citizenship: US  
Mailing Address: Same as above

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2012, then personally appeared before me the above-named **Qi Bao** 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.

\_\_\_\_\_  
Notary Public

Print Name:

\_\_\_\_\_  
My Commission expires \_\_\_ / \_\_\_ / \_\_\_

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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;

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**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: Qin Xin  
Residence: 323 N. Butternut Ave.  
Broken Arrow, OK 74012  
United States of America  
Citizenship: CN  
Mailing Address: Same as above

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2012, then personally appeared before me the above-named **Qin Xin** 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.

\_\_\_\_\_  
Notary Public

Print Name:

\_\_\_\_\_  
My Commission expires \_\_\_ / \_\_\_ / \_\_\_

Date: 2/17/2012

[Signature]  
Inventor's Signature

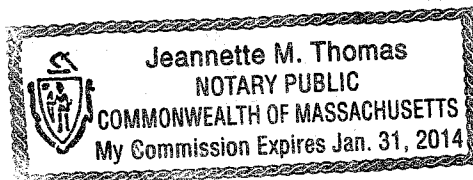
Print full name of second inventor: Feng Zhang  
Residence: 40 Cider Hill Lane  
Sherborn, MA 01770  
United States of America  
Citizenship: US  
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts  
COUNTY OF Middlesex

On this 17<sup>th</sup> day of February, 2012, then personally appeared before me the above-named **Feng Zhang** known to me through satisfactory evidence of identification  employee identification card;  driver's license;  (other) personally known 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.

[Signature]  
Notary Public

Print Name: Jeannette M. Thomas  
My Commission expires 1/31/2014



Date: Feb. 17, 2012

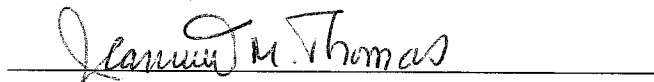


Inventor's Signature

Print full name of third inventor: Qi Bao  
Residence: 228 Liberty Square Road  
Boxborough, MA 01719  
United States of America  
Citizenship: US  
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts  
COUNTY OF Middlesex

On this 17<sup>th</sup> day of February, 2012, then personally appeared before me the above-named **Qi Bao** known to me through satisfactory evidence of identification  employee identification card;  driver's license;  (other) personally known 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.



Notary Public

Print Name:

Jeannette M. Thomas

My Commission expires 1 / 31 / 2014

