

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT												
NATURE OF CONVEYANCE:	Corrective Assignment to correct the Assignor - "Be Wu" previously recorded on Reel 029514 Frame 0555. Assignor(s) hereby confirms the Assignor - Ben Wu.												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ben Wu</td> <td>12/19/2012</td> </tr> <tr> <td>Derek Lin</td> <td>12/19/2012</td> </tr> <tr> <td>Deepesh Chaudhary</td> <td>12/19/2012</td> </tr> <tr> <td>Lubomir P. Petrov</td> <td>12/19/2012</td> </tr> <tr> <td>Sagy Volkov</td> <td>12/19/2012</td> </tr> </tbody> </table>		Name	Execution Date	Ben Wu	12/19/2012	Derek Lin	12/19/2012	Deepesh Chaudhary	12/19/2012	Lubomir P. Petrov	12/19/2012	Sagy Volkov	12/19/2012
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Lubomir P. Petrov	12/19/2012												
Sagy Volkov	12/19/2012												
RECEIVING PARTY DATA													
Name:	EMC Corporation												
Street Address:	176 South Street												
Internal Address:	Office of General Counsel												
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>13723134</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13723134								
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Application Number:	13723134												
CORRESPONDENCE DATA													
Fax Number:	6503262799												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	(650) 326-2701												
Email:	Byoung@young-iplaw.com												
Correspondent Name:	Barry N. Young												
Address Line 1:	P.O. Box 61197												
Address Line 4:	Palo Alto, CALIFORNIA 04306												
ATTORNEY DOCKET NUMBER:	E003-1638US												

OP \$40.00 13723134

NAME OF SUBMITTER:

Barry N. Young

Total Attachments: 8

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OP \$40.00 13723134

PATENT

REEL: 029544 FRAME: 0003

ASSIGNMENT

WHEREAS, we, **Ben Wu, Derek Lin, Deepesh Chaudhary, Lubomir P. Petrov** and **Sagy Volkov** (Inventors/Assignors) 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

PREDICTING DATA UNAVAILABILITY AND DATA LOSS EVENTS IN LARGE DATABASE SYSTEMS

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 **December 20, 2012** as **U.S. Application No. 13/723,134**;
- 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: 12/19/2012

Ben Wu
Inventor's Signature

Print full name of first inventor:

Ben Wu

Residence:

San Jose, California

Citizenship:

US

Mailing Address:

3326 Provence Ct

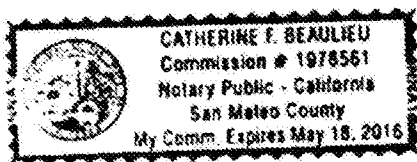
San Jose, California 95135

STATE OF California
COUNTY OF San Mateo

On this 19 day of December, 2012, before me appeared **Ben Wu** who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Catherine F. Beauhieu
Notary Public

Print Name: Catherine F. Beauhieu
My Commission expires 5/18/2016

Date: 12/19/12

Derek Lin
Inventor's Signature

Print full name of second inventor:

Derek Lin

Residence:

San Mateo, California

Citizenship:

US

Mailing Address:

225 Cupertino Way
San Mateo, California 94403

STATE OF California
COUNTY OF San Mateo

On this 19 day of December, 2012, before me appeared **Derek Lin** who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Catherine F. Beaulieu
Notary Public

Print Name: Catherine F. Beaulieu
My Commission expires 5/18/2016

Date: 12/19/2012



Inventor's Signature

Print full name of third inventor:

Deepesh Chaudhary

Residence:

Foster City, California

Citizenship:

IN

Mailing Address:

600 Edgewater Blvd , Unit 308

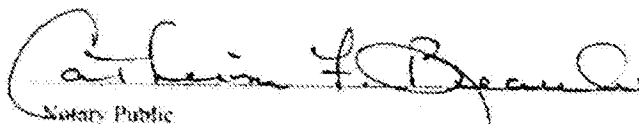
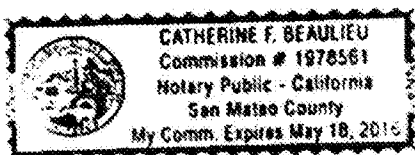
Foster City, California 94404

STATE OF California
COUNTY OF San Mateo

On this 19 day of December, 2012, before me appeared **Deepesh Chaudhary** who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Notary Public

Print Name: Catherine F. Beaulieu

My Commission expires 5/18/2016

Date: 12/19/2012



Inventor's Signature

Print full name of fourth inventor:

Lubomir P. Petrov

Residence:

San Ramon, California

Citizenship:

US

Mailing Address:

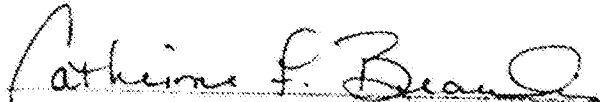
2889 Sombrero Circle
San Ramon, California 94583

STATE OF California
COUNTY OF San Mateo

On this 19 day of December, 2012, before me appeared **Lubomir P. Petrov** who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

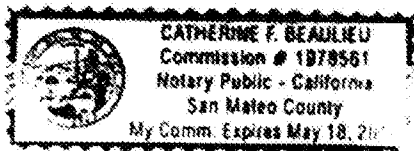
WITNESS my hand and official seal.



Notary Public

Print Name: Catherine F. Beaulieu

My Commission expires 5-18-2016



Date: 12/20/2012

Sagy Volkov
Inventor's Signature

Print full name of fifth inventor:

Sagy Volkov

Residence:

San Jose, California

Citizenship:

IL

Mailing Address:

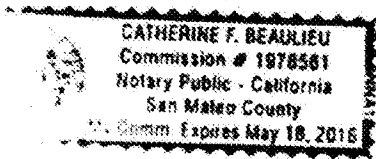
1445 Buckthorne Way
San Jose, California 95129

STATE OF California
COUNTY OF San Mateo

On this 20 day of December, 2012, before me appeared **Sagy Volkov** who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Catherine F. Beaulieu
Notary Public

Print Name: Catherine F. Beaulieu

My Commission expires 5/18/2016