

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2753965

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>STEPHEN R. IVES</td> <td>10/16/2009</td> </tr> <tr> <td>JOHN F. MADDEN JR.</td> <td>10/16/2009</td> </tr> <tr> <td>MICHAEL DUDNIK</td> <td>10/15/2009</td> </tr> <tr> <td>HAGIT BRIT-ARTZI</td> <td>10/15/2009</td> </tr> <tr> <td>ROI RAZ</td> <td>10/30/2009</td> </tr> <tr> <td>HUI WANG</td> <td>10/16/2009</td> </tr> <tr> <td>GABI HERSHKOVITZ</td> <td>11/16/2009</td> </tr> <tr> <td>QUN FAN</td> <td>12/14/2009</td> </tr> <tr> <td>OFER MICHAEL</td> <td>12/09/2009</td> </tr> </tbody> </table>		Name	Execution Date	STEPHEN R. IVES	10/16/2009	JOHN F. MADDEN JR.	10/16/2009	MICHAEL DUDNIK	10/15/2009	HAGIT BRIT-ARTZI	10/15/2009	ROI RAZ	10/30/2009	HUI WANG	10/16/2009	GABI HERSHKOVITZ	11/16/2009	QUN FAN	12/14/2009	OFER MICHAEL	12/09/2009
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QUN FAN	12/14/2009																				
OFER MICHAEL	12/09/2009																				
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>14197618</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14197618																
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Application Number:	14197618																				
CORRESPONDENCE DATA																					
Fax Number:																					
Phone:	508-898-8601																				
Email:	docketing@westboro-ip.com																				
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>																					
Correspondent Name:	MUIRHEAD AND SATURNELLI, LLC																				
Address Line 1:	200 FRIBERG PARKWAY, SUITE 1001																				
Address Line 4:	WESTBOROUGH, MASSACHUSETTS 01581																				

PATENT

ATTORNEY DOCKET NUMBER:	EMS-324USCON1
NAME OF SUBMITTER:	ANNE E. SATURNELLI
Signature:	/Anne E. Saturnelli/
Date:	03/05/2014

**Total Attachments: 31**

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## ASSIGNMENT

**WHEREAS**, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roi Raz, Hui Wang and Gabi Hershkovitz, 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 **TECHNIQUES FOR PERFORMING DATA MIGRATION**, 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 September 29, 2009 as U.S. Application No. 12/586,925;
- 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: 10/16/2009

*Stephen R. Ives*  
Inventor's Signature

Print full name of first inventor:

**Stephen R. Ives**

Residence:

26 Shrewsbury Street

West Boylston, MA 01583

Citizenship:

U.S.A.

Mailing Address:

Same

STATE OF Massachusetts  
COUNTY OF Middlesex

On this 16 day of October, 2009, then personally appeared before me the above-named **Stephen R. Ives** known to me through satisfactory evidence of identification [ ] employee identification card; [ ] driver's license; [x] (other) 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.

*Nancy E. Buck*  
Notary Public

Print Name: Nancy E. Buck

My Commission expires: 08-27-2010

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

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

Print full name of second inventor: **John F. Madden, Jr.**  
Residence: 28 Steppingstone Drive  
Holden, MA 01520  
Citizenship: USA  
Mailing Address: Same

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **John F. Madden, Jr.** 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:

**Michael Dudnik**

Residence:

390 Cherry Street  
Newton, MA 02465

Citizenship:

Israel

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Michael Dudnik** 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:

**Hagit Brit-Artzi**

Residence:

29 Berkeley Road  
Framingham, MA 01701

Citizenship:

Israel

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Hagit Brit-Artzi** 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:

**Roi Raz**

Residence:

66 Cole Avenue

Providence, RI 02906

Citizenship:

USA

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Roi Raz** 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:

**Hui Wang**

Residence:

60 South Street  
Upton, MA 01568

Citizenship:

USA

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Hui Wang** 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:

**Gabi Hershkovitz**

Residence:

21 Nardone Road  
Newton, MA 02459

Citizenship:

USA

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Gabi Hershkovitz** 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:

## ASSIGNMENT

**WHEREAS**, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-  
Artzi, Roi Raz, Hui Wang and Gabi Hershkovitz, 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 **TECHNIQUES FOR PERFORMING DATA MIGRATION**,  
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 September 29, 2009 as U.S. Application No. 12/586,925;
- 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: \_\_\_\_\_

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

Print full name of first inventor:

**Stephen R. Ives**

Residence:

26 Shrewsbury Street  
West Boylston, MA 01583

Citizenship:

U.S.A.

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Stephen R. Ives** 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:

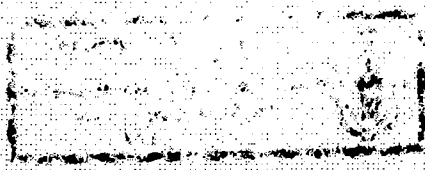
Date: 10/16/09

John F. Madden, Jr.  
Inventor's Signature

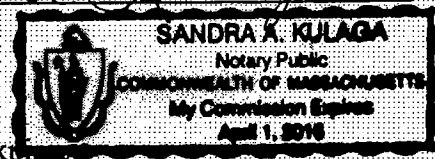
Print full name of second inventor: **John F. Madden, Jr.**  
Residence: 28 Steppingstone Drive  
Holden, MA 01520  
Citizenship: USA  
Mailing Address: Same

STATE OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

On this 16 day of OCTOBER, 2009, then personally appeared before me the above-named **John F. Madden, Jr.** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) PERSONALLY 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. Kulaga  
Notary Public  
Print Name: **SANDRA A. KULAGA**  
My Commission expires **April 1, 2016**



Date: 10/15/2009

[Signature]  
Inventor's Signature

Print full name of third inventor: **Michael Dudnik**  
Residence: 390 Cherry Street  
Newton, MA 02465  
Citizenship: Israel  
Mailing Address: Same

STATE OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

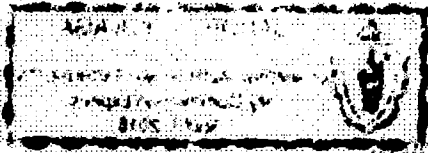
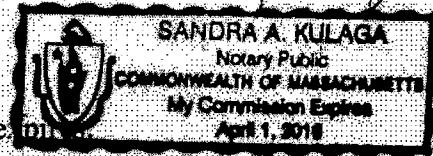
On this 15 day of OCTOBER, 2009, then personally appeared before me the above-named **Michael Dudnik** known to me through satisfactory evidence of identification  employee identification card;  driver's license;  (other) \_\_\_\_\_ to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

[Signature]

Notary Public

Print Name:

My Commission expires



Date: 10/15/09

[Signature]  
Inventor's Signature

Print full name of third inventor:

**Hagit Brit-Artzi**

Residence:

~~29 Berkeley Road~~ 4 Sullivan Terrace  
Framingham, MA 01701

Citizenship:

Israel USA

10/15/09  
HB

Mailing Address:

Same

STATE OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

On this 15 day of OCTOBER, 2009, then personally appeared before me the above-named **Hagit Brit-Artzi** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other)

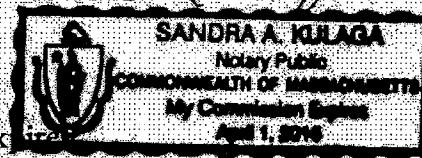
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Sandra A. Kulaga

Notary Public

Print Name:

My Commission expires



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

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

Print full name of third inventor:

**Roi Raz**

Residence:

66 Cole Avenue

Providence, RI 02906

Citizenship:

USA

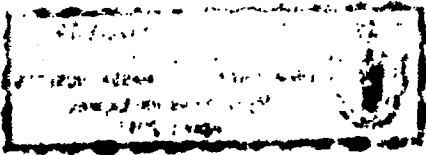
Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Roi Raz** 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:




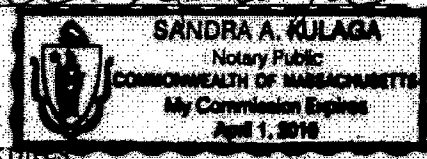
Date: 10-16-2009

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

Print full name of third inventor: **Hui Wang**  
Residence: 60 South Street  
Upton, MA 01568  
Citizenship: USA  
Mailing Address: Same

STATE OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

On this 16 day of OCTOBER, 2009, then personally appeared before me the above-named **Hui Wang** 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:

**Gabi Hershkovitz**

Residence:

21 Nardone Road  
Newton, MA 02459

Citizenship:

USA

Mailing Address:

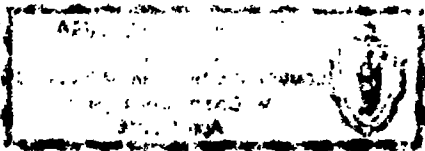
Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Gabi Hershkovitz** 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:

## ASSIGNMENT

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the specification of which:

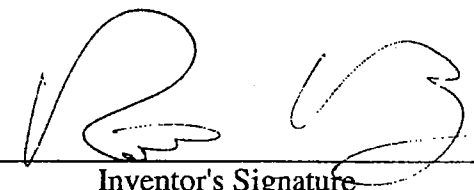
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- was filed on September 29, 2009 as U.S. Application No. 12/586,925;
- was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

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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

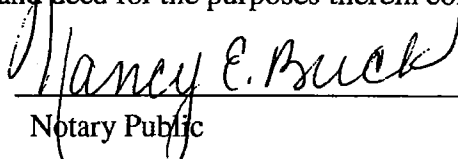
Date: 10/30/09

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

Print full name of third inventor: **Roi Raz**  
Residence: 66 Cole Avenue  
Providence, RI 02906  
Citizenship: USA  
Mailing Address: Same

STATE OF Massachusetts  
COUNTY OF Middlesex

On this 30 day of October, 2009, then personally appeared before me the above-named **Roi Raz** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) 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.

  
\_\_\_\_\_  
Notary Public  
Print Name: NANCY E. BUCK  
My Commission expires: AUG 27, 2010

## ASSIGNMENT

**WHEREAS**, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roi Raz, Hui Wang and Gabi HersHKovitz, 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 **TECHNIQUES FOR PERFORMING DATA MIGRATION**, the specification of which:

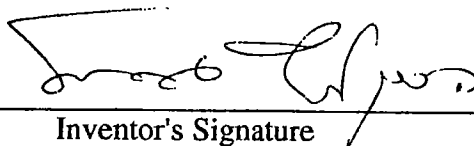
- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on September 29, 2009 as U.S. Application No. 12/586,925;
- was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

**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

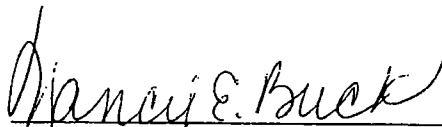
Date: 11/16/09

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

Print full name of third inventor: **Gabi Herskovitz**  
Residence: 21 Nardone Road  
Newton, MA 02459  
Citizenship: USA  
Mailing Address: Same

STATE OF Massachusetts  
COUNTY OF Middlesex

On this 16 day of November, 2009, then personally appeared before me the above-named **Gabi Herskovitz** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) 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.

  
\_\_\_\_\_  
Notary Public  
Print Name: Nancy E Buck  
My Commission expires: 8-27-2010

**ASSIGNMENT**

**WHEREAS**, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-  
Artzi, Rои Raz, Hui Wang, Gabi Hershkovitz, Qun Fan and Ofer Michael 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 **TECHNIQUES FOR  
PERFORMING DATA MIGRATION**, 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 September 29, 2009 as U.S. Application No. 12/586,925;
- 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: \_\_\_\_\_

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

Print full name of first inventor:	Stephen R. Ives
Residence:	26 Shrewsbury Street West Boylston, MA 01583
Citizenship:	U.S.A.
Mailing Address:	Same

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Stephen R. Ives** 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 second inventor: **John F. Madden, Jr.**  
Residence: **28 Steppingstone Drive**  
**Holden, MA 01520**  
Citizenship: **USA**  
Mailing Address: **Same**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **John F. Madden, Jr.** 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: Michael Dudnik  
Residence: 390 Cherry Street  
Newton, MA 02465  
Citizenship: Israel  
Mailing Address: Same

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named Michael Dudnik 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 fourth inventor: Hagit Brit-Artzi  
Residence: 29 Berkeley Road  
Framingham, MA 01701  
Citizenship: Israel  
Mailing Address: Same

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named Hagit Brit-Artzi 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 fifth inventor:

Roi Raz

Residence:

66 Cole Avenue

Providence, RI 02906

Citizenship:

USA

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named Roi Raz 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 sixth inventor: **Hui Wang**  
Residence: 60 South Street  
Upton, MA 01568  
Citizenship: USA  
Mailing Address: Same

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Hui Wang** 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 seventh inventor: **Gabi Hershkovitz**  
Residence: **21 Nardone Road**  
**Newton, MA 02459**  
Citizenship: **USA**  
Mailing Address: **Same**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 2009, then personally appeared before me the above-named **Gabi Hershkovitz** 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: 12/14/09

[Signature]  
Inventor's Signature

Print full name of eighth inventor:

Qun Fan

Residence:

211 Howard Street  
Northborough, MA 01532

Citizenship:

~~China~~ U.S.A. 12/14/09

Mailing Address:

Same

STATE OF Massachusetts  
COUNTY OF middlesex

On this 14<sup>th</sup> day of December, 2009, then personally appeared before me the above-named Qun Fan 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.

Kristina A. White  
Notary Public

Print Name: Kristina A. White  
My Commission expires: August 25, 2011



KRISTINA A. WHITE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
August 25, 2011

Date: 12/9/09

*O. Michael*

Inventor's Signature

Print full name of ninth inventor: **Ofer Michael**  
Residence: **135 Technology Drive, Suite 100**  
**Irvine, CA 92618**  
Citizenship: **USA**  
Mailing Address: **Same**

STATE OF California  
COUNTY OF Orange

On this 9 day of December, 2009, then personally appeared before me the above-named **Ofer Michael** 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.

*See attached  
California  
Acknowledgment*

*Susan E Knudson*

Notary Public

Print Name: *Susan E Knudson*

My Commission expires: *April 14, 2011*





EMS-32465 EMC-09-09

**ACKNOWLEDGMENT**

State of California  
County of Orange

On 9 Dec 2009 before me, Susan E. Knudson, Notary Public

personally appeared Ofer Michael

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.



Signature Susan E. Knudson (Seal)

PATENT