

## 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>Marik Marshak</td> <td>04/05/2013</td> </tr> <tr> <td>Alexandr Veprinsky</td> <td>04/05/2013</td> </tr> <tr> <td>Stephen Richard Ives</td> <td>04/04/2013</td> </tr> <tr> <td>Arieh Don</td> <td>04/05/2013</td> </tr> </tbody> </table>		Name	Execution Date	Marik Marshak	04/05/2013	Alexandr Veprinsky	04/05/2013	Stephen Richard Ives	04/04/2013	Arieh Don	04/05/2013
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>EMC Corporation</td> </tr> <tr> <td>Street Address:</td> <td>176 South Street</td> </tr> <tr> <td>City:</td> <td>Hopkinton</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>01748</td> </tr> </table>		Name:	EMC Corporation	Street Address:	176 South Street	City:	Hopkinton	State/Country:	MASSACHUSETTS	Postal Code:	01748
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number: <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 508-898-8601 Email: docketing@westboro-ip.com Correspondent Name: MUIRHEAD AND SATURNELLI, LLC Address Line 1: 200 FRIBERG PARKWAY, SUITE 1001 Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581											
ATTORNEY DOCKET NUMBER:	EMS-508US										
NAME OF SUBMITTER:	Donald W. Muirhead										
Signature:	/Donald W. Muirhead/										

Date:

04/05/2013

**Total Attachments: 5**

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## ASSIGNMENT

WHEREAS, we, Marik MARSHAK, Alexandr VEPRINSKY, Stephen Richard IVES and Arie DON 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 **NON-INTRUSIVE AUTOMATED STORAGE TIERING USING INFORMATION OF FRONT END STORAGE ACTIVITIES**, the specification of which:

- ☒ [ X ] 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 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 attorneys of Muirhead and Saturnelli, LLC to insert here in parenthesis ( 13/857,548 s/kd 4-5-13 ) 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: April 5 2013

[Signature]  
Inventor's Signature

Print full name of first inventor:

Marik MARSHAK

Residence:

14 Juniper Lane  
Newton, MA 02459

Citizenship:

U.S.A.

Mailing Address:

Same

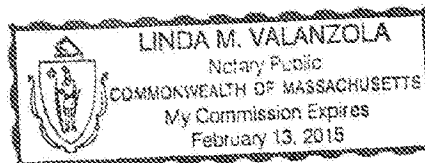
STATE OF MASSACHUSETTS  
COUNTY OF Middlesex

On this 5 day of April, 2013, then personally appeared before me the above-named Marik MARSHAK 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.

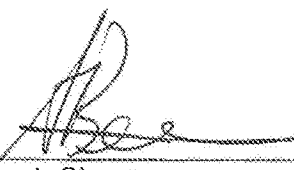
[Signature]  
Notary Public

Print Name: Linda M. Valanzola

My Commission expires: 2/13/2015



Date: 4/5/2013

  
Inventor's Signature

Print full name of second inventor:

**Alexandr VEPRINSKY**

Residence:

145 Babcock Street  
Brookline, MA 02446

Citizenship:

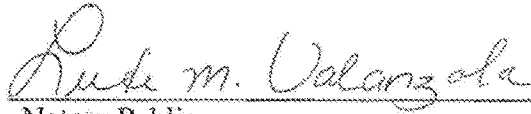
U.S.A.

Mailing Address:

Same

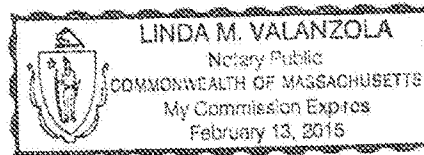
STATE OF MASSACHUSETTS  
COUNTY OF Middlesex

On this 5 day of April, 2013, then personally appeared before me the above-named **Alexandr VEPRINSKY** 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.

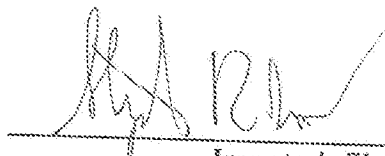
  
Notary Public

Print Name: Linda M. Valanzola

My Commission expires: 2/13/2015



Date: 4/4/13



Inventor's Signature

Print full name of third inventor:

**Stephen Richard IVES**

Residence:

26 Shrewsbury Street

West Boylston, MA 01583

Citizenship:

U.S.A.

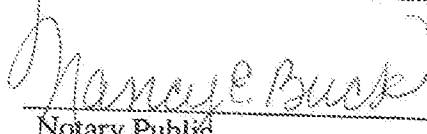
Mailing Address:

Same

STATE OF MASSACHUSETTS

COUNTY OF Worcester

On this 4 day of April, 2013, then personally appeared before me the above-named **Stephen Richard 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.



Notary Public

Print Name: Nancy E. Buck

My Commission expires: 8/11/2017

Date: 4-5-13

[Signature]  
Inventor's Signature

Print full name of fourth inventor:

Arieh DON

Residence:

45 Dexter Road  
Newton, MA 02460

Citizenship:

U.S.A.

Mailing Address:

Same

STATE OF MASSACHUSETTS

COUNTY OF Middlesex

On this 5 day of April, 2013, then personally appeared before me the above-named Arieh DON 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: Linda M. Valanzola

My Commission expires: 2/13/2015

