

<b>PATENT ASSIGNMENT COVER SHEET</b>
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 Stylesheet Version v1.2

EPAS ID: PAT4594374

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
WILLIAM J. ELLIOTT	06/19/2017
ANOOP GEORGE NINAN	09/05/2017
EVGENY ROYTMAN	06/22/2017
THOMAS L. WATSON	08/15/2017
AMEER JABBAR	06/19/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EMC IP HOLDING COMPANY LLC
<b>Street Address:</b>	176 SOUTH STREET
<b>City:</b>	HOPKINTON
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01748
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15497893
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Email:</b>	amanda.bernier@emc.com
<b>Correspondent Name:</b>	EMC IP HOLDING COMPANY LLC
<b>Address Line 1:</b>	176 SOUTH STREET
<b>Address Line 4:</b>	HOPKINTON, MASSACHUSETTS 01748
<b>ATTORNEY DOCKET NUMBER:</b>	EMC-13-0367-US-1
<b>NAME OF SUBMITTER:</b>	AMANDA M. BERNIER
<b>SIGNATURE:</b>	/Amanda M. Bernier/
<b>DATE SIGNED:</b>	09/14/2017
<b>Total Attachments: 7</b>	
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## ASSIGNMENT

**WHEREAS**, we, William J. Elliott, Anoop George Ninan, Evgeny Roytman, Thomas L. Watson and Ameer Jabbar 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 *STORAGE PROVISIONING IN A DATA STORAGE ENVIRONMENT* (Application), 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 April 26, 2017 as U.S. Application No. 15/497,893;
- was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

**WHEREAS**, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware 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 our attorneys, EMC IP Holding Company LLC, to insert here in parenthesis (15/497,893 filed April 26, 2017) 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:

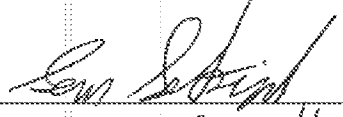
Date: June 19, 2017

  
Inventor's Signature

Print full name of inventor **William J. Elliott**  
Residence **965 Wachusett Street**  
**Holden MA 01453**  
Citizenship **US**  
Mailing Address **Same as above**

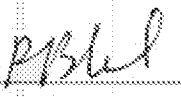
I, Sean Sothysik (name of first witness), whose residential address is  
103 Nicholas Ave Boylston MA

was personally present and did see William J. Elliott (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

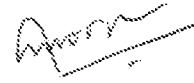
 (signature of first witness)  
Signed at 176 South St Hopkinton MA (location of witness signature)  
on this day, June 19, 20 17 (date of signature).

I, PUNEET LAL (name of second witness), whose residential address is  
8 BETHS RD, SHREWSBURY MA 01545

was personally present and did see William J. Elliott (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

 (signature of second witness)  
Signed at 176 South St Hopkinton MA (location of witness signature)  
on this day, JUNE 19, 20 17 (date of signature).

Date: 09-05-2017

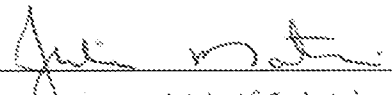


Inventor's Signature

Print full name of inventor **Anoop George Ninan**  
Residence 13 Purdue Drive  
Milford, MA 01757  
Citizenship US  
Mailing Address Same as above


I, JULIA MATHAI (name of first witness), whose residential address is  
14 WASHINGTON LN, HOPKINTON, MA 01748

was personally present and did see Anoop George Ninan (name of person signing the assignment), who is personally known to me, execute the above assignment.

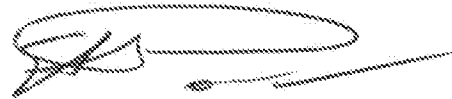
 (signature of first witness)  
Signed at 14 WASHINGTON LN, HOPKINTON, MA 01748 (location of witness signature)  
on this day, 09-05-, 2017 (date of signature).

I, Sushma Tannicreddi (name of second witness), whose residential address is  
5 Constitution Ct, # 404, Hopkinton MA 01748

was personally present and did see Anoop George Ninan (name of person signing the assignment), who is personally known to me, execute the above assignment.

 (signature of second witness)  
Signed at 5 Constitution Ct, # 404, Hopkinton MA 01748 (location of witness signature)  
on this day, 09-05, 2017 (date of signature).

Date: June 22, 2017



Inventor's Signature

Print full name of inventor	<u>Evgeny Roytman</u>
Residence	<u>2 Fox Hollow Lane</u>
	<u>Sharon, MA 02067</u>
Citizenship	<u>US</u>
Mailing Address	<u>Same as above</u>

I, Irina Roytman (name of first witness), whose residential address is 2 Fox Hollow Ln., Sharon, MA 02067

was personally present and did see Evgeny Roytman (name of person signing the assignment), who is personally known to me, execute the above assignment.

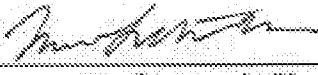
[Signature] (signature of first witness)  
Signed at 2 Fox Hollow Ln, Sharon, MA 02067 (location of witness signature)  
on this day, June 22, 2017 (date of signature).

I, Anthony Roytman (name of second witness), whose residential address is 2 Fox Hollow Ln., Sharon, MA 02067

was personally present and did see Evgeny Roytman (name of person signing the assignment), who is personally known to me, execute the above assignment.

[Signature] (signature of second witness)  
Signed at 2 Fox Hollow Ln., Sharon, MA 02067 (location of witness signature)  
on this day, June 22, 2017 (date of signature).

Date: 8-15-2017

  
Inventor's Signature

Print full name of inventor

Thomas L. Watson

Residence

3312 Meadow Wood Drive

Richardson, TX 75082

Citizenship

US

Mailing Address

Same as above

I, David Watson (name of first witness), whose residential address is  
3312 Meadow Wood Drive, Richardson, TX  
was personally present and did see Thomas L. Watson (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

David Watson (signature of first witness)  
Signed at Residence (location of witness signature)  
on this day, August 15th, 2017 (date of signature).

I, Anita P. Watson (name of second witness), whose residential address is  
3312 Meadow Wood Dr, Richardson, TX 75082  
was personally present and did see Thomas L. Watson (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

Anita P. Watson (signature of second witness)  
Signed at Residence (location of witness signature)  
on this day, August 15th, 2017 (date of signature).

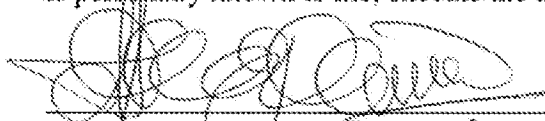


Date: 6/19/2017

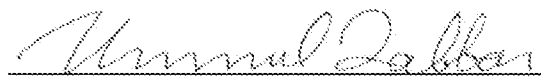
  
Inventor's Signature

Print full name of inventor **Ameer Jabbar**  
Residence 1086 Rolling Forest Court  
Lilburn, GA 30047  
Citizenship US  
Mailing Address Same as above

I, ABDUL JABBAR (name of first witness), whose residential address is  
4573 CREEK Forest Ct, Lilburn, GA 30047  
was personally present and did see Ameer Jabbar (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

  
Signed at LILBURN, GA 30047 (location of witness signature)  
on this day, June 19, 2017 (date of signature).

I, UMMUL JABBAR (name of second witness), whose residential address is  
4573 Creek forest Ct, Lilburn, GA 30047  
was personally present and did see Ameer Jabbar (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

  
Signed at 4573 Creek Forest Ct Lilburn (location of witness signature)  
on this day, June 19, 2017 (date of signature).

P