

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4474966

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
YUSHENG LIU	06/23/2017
JAMIN JIANBIN KANG	06/23/2017
XINLEI XU	06/23/2017
RUIYONG JIA	06/23/2017
JIAN GAO	06/23/2017
LIFENG YANG	06/23/2017
<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>
Application Number:	15630863
<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
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<b>Address Line 4:</b>	HOPKINTON, MASSACHUSETTS 01748
<b>ATTORNEY DOCKET NUMBER:</b>	EMC-16-0245(CN1)US
<b>NAME OF SUBMITTER:</b>	AMANDA M. BERNIER
<b>SIGNATURE:</b>	/Amanda M. Bernier/
<b>DATE SIGNED:</b>	06/23/2017
<b>Total Attachments: 8</b>	
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source=EMC-16-0245\_CN1\_US\_ExecutedAssignment#page8.tif

## ASSIGNMENT

**WHEREAS**, we, Yousheng Liu, Jamin Jianbin Kang, Xinlei Xu, Ruiyong Jia, Jian Gao and Lifeng Yang, 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 *METHOD AND SYSTEM FOR MANAGING STORAGE SYSTEM* (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 June 22, 2017 as U.S. Application No. 15/630,863;
- ☐ 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 (15/630,863 filed June 21, 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: 2017. 6. 23

Yousheng Liu  
Inventor's Signature

Print full name of inventor

Yousheng Liu

Residence

Qiangyuan Road, Daxing District  
102600 Beijing, CN

Citizenship

CN

Mailing Address

Same as above

I, Xiongchong Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Yousheng Liu (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

Xiongchong Li (Signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 6/23, 2017 (date of signature).

I, Baote Zhuo (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Yousheng Liu (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

Baote Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 06/23, 2017 (date of signature).

Date: 2017.6.23 Jamin Kang  
Inventor's Signature

Print full name of inventor Jamin Jianbin Kang  
Residence #902, Building 13, WenhuiYuan, Haidian  
100082 Beijing, CN  
Citizenship CN  
Mailing Address Same as above

I, Xiongcheng Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Jamin Jianbin Kang (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

Xiongcheng Li (Signature of first witness),  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 6/23, 20 17 (date of signature).

I, Baoze Zhuo (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Jamin Jianbin Kang (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

Baoze Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 6/23, 20 17 (date of signature).

Date: 2017.6.23 Xinlei Xu  
Inventor's Signature

Print full name of inventor Xinlei Xu  
Residence 6-6-602, Zhongyuan, Tiantongyuan, Changping  
100010 Beijing, CN  
Citizenship CN  
Mailing Address Same as above

I, Xiongcheng Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Xinlei Xu (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Xiongcheng Li (Signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 6/23, 2017 (date of signature).

I, Baoto Zhuo (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Xinlei Xu (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Baoto Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 06/23, 2017 (date of signature).

Date: 2017.6.23

Ruiyong Jia

Inventor's Signature

Print full name of inventor

Ruiyong Jia

Residence

Room 403, Unit 1, Building 27, 105 West 3rd Ring  
North Road, HaiDian District  
100010 Beijing, CN

Citizenship

CN

Mailing Address

Same as above

I, Xiongcheng Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC  
was personally present and did see Ruiyong Jia (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Xiongcheng Li (Signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC (location of witness signature)  
on this day, 6/23, 20 17 (date of signature).

I, Baote Zhuo (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC  
was personally present and did see Ruiyong Jia (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Baote Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC (location of witness signature)  
on this day, 06/23, 20 17 (date of signature).



Date: 2017.6.23

  
Inventor's Signature

Print full name of inventor

Jian Gao

Residence

601# 16 Building Rongfeng 2008,  
Xicheng District  
100000 Beijing, CN

Citizenship

CN

Mailing Address

Same as above

I, Xiongcheng Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Jian Gao (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Xiongcheng Li (Signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
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I, Baote Zhuo (name of second witness), whose residential address is  
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personally known to me, execute the above assignment.

Baote Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 06/23, 20 17 (date of signature).

Date: 2017.6.23

Lifeng Yang  
Inventor's Signature

Print full name of inventor

Lifeng Yang

Residence

10-3-50A, Xingfu-jiayuan, Dongchen District  
100062 Beijing, CN

Citizenship

CN

Mailing Address

Same as above

I, Xiongcheng Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Lifeng Yang (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Xiongcheng Li (Signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 6/23, 20 17 (date of signature).

I, Baote Zhuo (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC  
was personally present and did see Lifeng Yang (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

Baote Zhuo (Signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 06/23, 20 17 (date of signature).