# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4474966

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
YOUSHENG 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

## **RECEIVING PARTY DATA**

Name:	EMC IP HOLDING COMPANY LLC
Street Address:	176 SOUTH STREET
City:	HOPKINTON
State/Country:	MASSACHUSETTS
Postal Code:	01748

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15630863

### **CORRESPONDENCE DATA**

Fax Number:

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.

**Email:** amanda.bernier@emc.com

Correspondent Name: EMC IP HOLDING COMPANY LLC

Address Line 1: 176 SOUTH STREET

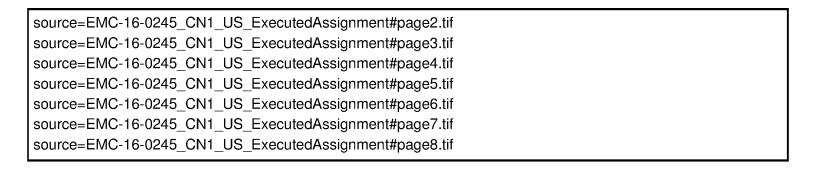
Address Line 4: HOPKINTON, MASSACHUSETTS 01748

ATTORNEY DOCKET NUMBER:	EMC-16-0245(CN1)US
NAME OF SUBMITTER:	AMANDA M. BERNIER
SIGNATURE:	/Amanda M. Bernier/
DATE SIGNED:	06/23/2017

**Total Attachments: 8** 

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PATENT REEL: 042795 FRAME: 0098



PATENT REEL: 042795 FRAME: 0099

#### 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;
[X]	was filed on June 22, 2017 as U.S. Application No. 15/630,863;
[]	was patented under U.S. Patent Noon

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,

PATENT REEL: 042795 FRAME: 0100 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	Joushum Linventor's Signature
	/Inventor's Signature
Print full name of inventor	Yousheng Liu
Residence	Qiangyuang Road, Daxing District
	102600 Beijing, CN
Citizenship	CN
Mailing Address	Same as above
I, Xing chang L' (nam 7/F, Morp D, Tsinghua Science	pe of first witness), whose residential address is fark, Hailian, Beijing PRC
	Liu (name of person signing the assignment), who
is personally known to me, execute the above	assignment.
Kiory chang Li Signed at 7/F, Block D, Tsiryhua Seinn shir day, 6/23	(Signature of first witness)  (Signature of first witness)  (Dian Beiling Ppc  (location of witness signature)  20 () (date of signature).
I, Baole Thuo (nam 7/F. Block D. Tsinghua Science was personally present and did see Yousheng is personally known to me, execute the above	ne of second witness), whose residential address is the payk, Haidian. Beijing PRC Liu (name of person signing the assignment), who assignment.
Baote Thuo Signed at 7 F. Block D. Tsinghua Sa on this day, 06/23	(Signature of second witness)  Sience Park, Hai Dian Beijing PRC  Clocation of witness signature)  20_1 (date of signature).

Date: 2017. 6.23	Jamin Kany Inventor's Signature
	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 (n	ame of first witness), whose residential address is Part, Hai Dian, Beijing pre
1/F, Block D, Isinghua Science	Part, Haillian, 1821 1-8 ppe
	ianbin Kang (name of person signing the assignment),
who is personally known to me, execute the	e above assignment.
X jong cheng Li Signed at 7/F, Rlock D, Tsinghua Scie	(Signature of first witness),  Proposed for the Dian, Berlins proposed (location of witness signature)  _, 20_1/_ (date of signature).
on this day, $6/\sqrt{2}$	, 20_17 (date of signature).
	<del>-</del> -
I, <u>Baote Thuo</u> (n	name of second witness), whose residential address is inches park, HaiDian, Beijing PRC
7/F, Block D. Tsinghua Son	ience park, MaiDian, Beijing PRC
was personally present and did see Jamin Ji	ianbin Kang (name of person signing the assignment),
who is personally known to me, execute the	e above assignment.
<b>5 7</b> - <b>7</b>	
Baste Thus	(Signature of second witness) <u>a Science Park</u> (location of witness signature)  _, 20_1 \( \) (date of signature).
Signed at 7/F, Block D. Isinglu	a Science Park (location of witness signature)
on this day, $\frac{ab}{2b}$	, 20/ (date of signature).

Date: WI7.6.25	Yihlei 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
	(name of first witness), whose residential address is Science Park, Hailian, Beijing Ppe I see Xinlei Xu (name of person signing the assignment), who is ute the above assignment.
Xiongehens Li Signed at 7/F, 13 lock D, Tein on this day, 6/23	(Signature of first witness)  yhua Surpace Park, Hailian Beijing Pac (location of witness signature)  , 2017 (date of signature).
1, Baols Thuo 7/F. Block D. Tsingh was personally present and did personally known to me, execu	(name of second witness), whose residential address is wa Sciente Park. Haidian. Beijing PRC I see Xinlei Xu (name of person signing the assignment), who is ute the above assignment.
Baoto Thu Signed at $\sqrt{F}$ Brook D on this day, 06/	(Signature of second witness)  Haidian. Beijing PRC  Tsing hua Sciente Park (location of witness signature)  23, 20_17 (date of signature).

Date: 20(7. 6.2)	Kuitong Jia	
Duto.	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, Xi'ors thens Li  7/F, Bluck D, Teinghua S  was personally present and did see R  personally known to me, execute the	name of first witness), whose residential address is evene fork, Hailian, Beijing free tuiyong Jia (name of person signing the assignment), who is above assignment.	
	(Signature of first witness)  Ceiena Pap. HaiDian, Beiging Pre (location of witness signature)	
I, Bao 12 7/wo (name of second witness), whose residential address is 7/F. Block D. Tsing Lua Science Park, Haidian, Baijing 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.		
Baoto Thuo Signed at 7/F, Block D. Tsin on this day, 06/23	(Signature of second witness)  Jua Science Park (location of witness signature)  , 20 1 (date of signature).	

Date: 2017.6.23	313
	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
Y'machen I:	
7/E Blood D. Tringhuer Science	me of first witness), whose residential address is fart, Hai Dian, Beijing PPC
	(name of person signing the assignment), who is
personally known to me, execute the above	
•	-
xionechers Li	(Signature of first witness)  (Signature of first witness)  (Popp, Hai'D'an, Iseijia) (Iocation of witness signature)  (Jocation of witness signature).
Signed at 7/F, Blook D, Tsinghua Scient	2 Port, Hailian Iseining ppe (location of witness signature)
on this day, 6/23_	, 20 / 7 (date of signature).
	,
I, Baste Thus (na	ame of second witness), whose residential address is
7/F. Brock D. Tsing hua Sciente	ame of second witness), whose residential address is $PRC$
was personally present and did see Jian Gao	o (name of person signing the assignment), who is
personally known to me, execute the above	assignment.
<b>h</b>	
Baste Thus	(Signature of second witness)
Signed at 7/F, Block V, Tsinghuas	(Signature of second witness)  Science Park . HaiDian Beiling PRC  (location of witness signature)  , 20_1 (date of signature).
on this day, Ob/23	, 20_1) (date of signature).

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Date: <u>W17. 6.23</u>	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, Xioscheng Li (name of first witness), whose residential address is  (F. Block D. Tsighua Science Park, Hai Dian, Beijing from was personally present and did see Lifeng Yang (name of person signing the assignment), who is personally known to me, execute the above assignment.  Xiongeleng Li (Signature of first witness)  Signed at 7/F, Block D, Tsinghua Science fair, Hai Dian, Beijing ppc (location of witness signature) on this day, 6/33, , 20_17 (date of signature).	
I, Baote Thuo (name of second witness), whose residential address is  \[ \text{F. Books Tsinghua Science Dark, Haidian Beijing PRC} \] was personally present and did see Lifeng Yang (name of person signing the assignment), who is personally known to me, execute the above assignment.  \[ \text{Baote Thuo}  \text{(Signature of second witness)}  \text{Book D, Tsinghua Science Darklocation of witness signature)} \] Signed at \[ \text{7F. Book D, Tsinghua Science Darklocation of witness signature)} \] on this day, \[ \text{06/vh}  \text{, 20_1} \text{ (date of signature)}.	

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