

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SHAOQIN GONG	01/09/2018
JIAN GAO	01/08/2018
GENG HAN	01/09/2018
HONGPO GAO	01/09/2018
REE LEI SUN	01/10/2018
XINLEI XU	01/09/2018
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:	15848642
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	Holly_Vigliatura@dell.com
Correspondent Name:	EMC IP HOLDING COMPANY LLC
Address Line 1:	176 SOUTH STREET
Address Line 4:	HOPKINTON, MASSACHUSETTS 01748
ATTORNEY DOCKET NUMBER:	EMC-16-0891.02
NAME OF SUBMITTER:	HOLLY VIGLIATURA
SIGNATURE:	/Holly Vigliatura/
DATE SIGNED:	01/11/2018
Total Attachments: 8	
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ASSIGNMENT

WHEREAS, we, Shaoqin Gong, Jian Gao, Geng Han, Hongpo Gao, Ree Lei Sun and Xinlei Xu 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 APPARATUS FOR ENSURING DATA CONSISTENCY** (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 December 20, 2017 as U.S. Application No. 15/848,642;

[] 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 (15/848,642 filed December 20, 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: 2018.1.9

Shaoqin Gong
Inventor's Signature

Print full name of inventor

Shaoqin Gong

Residence

No.29, Chengfu Road, Haidian District

Beijing, China

Citizenship

China

Mailing Address

Same as above

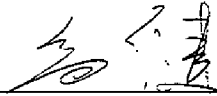
I, Jamin Kong (name of first witness), whose residential address is
7/F Block D, Tsinghua Science Park, Beijing
was personally present and did see **Shaoqin Gong** (name of person signing the assignment), who
is personally known to me, execute the above assignment.

Jamin Kong (signature of first witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1-10, 2018 (date of signature).

I, Jibing Dong (name of second witness), whose residential address is
7/F Block D, Tsinghua Science Park Beijing
was personally present and did see **Shaoqin Gong** (name of person signing the assignment), who
is personally known to me, execute the above assignment.

Jibing Dong (signature of second witness)
Signed at 7/F Block D, Tsinghua Science Park Beijing (location of witness signature)
on this day, 1-10, 2018 (date of signature).

Date: 2018.1.8



Inventor's Signature

Print full name of inventor

Jian Gao

Residence

8/F, Block D, Tsinghua Science Park

No.1 Zhongguancun East Road

Beijing, China 100084

Citizenship

China

Mailing Address

Same as above

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

Jamin Kang (signature of first witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

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

Jibing Dong (signature of second witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

Date: 2018.01.09



Inventor's Signature

Print full name of inventor

Geng Han

Residence

12-5-501, Xinlongcheng, Changping

Beijing, China 100010

Citizenship

China

Mailing Address

Same as above

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

Jamin Kang (signature of first witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

I, Jibang Dong (name of second witness), whose residential address is
7/F Block D, Tsinghua Science Park, Beijing
was personally present and did see **Geng Han** (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Jibang Dong (signature of second witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

Date: 2018.1.9

Hongpo Gao
Inventor's Signature

Print full name of inventor

Hongpo Gao

Residence

5-301 Building 1, Longyue Street No 10, Changping District
Beijing, China

Citizenship

China

Mailing Address

Same as above

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

Jamin Kang (signature of first witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

I, Jibing Dong (name of second witness), whose residential address is
7/F Block D, Tsinghua Science Park, Beijing
was personally present and did see **Hongpo Gao** (name of person signing the assignment), who
is personally known to me, execute the above assignment.

Jibing Dong (signature of second witness)
Signed at 7/F Block D, Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

Date: 2018. 1. 10

Sun Lei
Inventor's Signature

Print full name of inventor

Ree Lei Sun

Residence

9-1-301, GuoFengMeiTang

Beijing, China

Citizenship

China

Mailing Address

Same as above

I, Jamin Kang (name of first witness), whose residential address is
7/F Block D, Tsinghua Baihua Park No 1 Zhongguancun East Road, Beijing
was personally present and did see **Ree Lei Sun** (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Jamin Kang (signature of first witness)
Signed at 7/F Block D, Tsinghua Baihua Park, Beijing (location of witness signature)
on this day, 1. 10, 2018 (date of signature).

I, Jibing Dong (name of second witness), whose residential address is
7/F Block D, Tsinghua Swanee Park Beijing
was personally present and did see **Ree Lei Sun** (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Jibing Dong (signature of second witness)
Signed at 7/F Block D, Tsinghua Swanee Park Beijing (location of witness signature)
on this day, 1. 10, 2018 (date of signature).

Date: _____

2018.1.9

Xinlei Xu
Inventor's Signature

Print full name of inventor	Xinlei Xu
Residence	6-6-602, Tiantongyuan Zhong Yuan Beijing, China 100010
Citizenship	China
Mailing Address	Same as above

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

Jamin Kang (signature of first witness)
Signed at 7/F Block D. Tsinghua Science Park, Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).

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

Jibing Dong (signature of second witness)
Signed at 7/F Block D Tsinghua Science Park Beijing (location of witness signature)
on this day, 1.10, 2018 (date of signature).