

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LIFENG YANG	04/09/2018
JIAN GAO	04/09/2018
XINLEI XU	04/09/2018
RUIYONG JIA	04/09/2018
YOUSHENG LIU	04/09/2018
<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>	15954902
<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>	Holly_Vigliatura@dell.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-17-0006.02
<b>NAME OF SUBMITTER:</b>	HOLLY VIGLIATURA
<b>SIGNATURE:</b>	/Holly Vigliatura/
<b>DATE SIGNED:</b>	04/19/2018
<b>Total Attachments: 7</b>	
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## ASSIGNMENT

**WHEREAS**, we, Lifeng Yang, Jian Gao, Xinlei Xu, Ruiyong Jia, and Yousheng Liu, 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 **METHODS, DEVICES AND COMPUTER READABLE MEDIUMS FOR DATA SYNCHRONIZATION** (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 17, 2018 as U.S. Application No. 15/954902;
- 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 (15/954902 filed April 17, 2018) 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: 2018.4.9

Lifeng Yang  
Inventor's Signature

Print full name of inventor

**Lifeng Yang**

10-3-50A, Xingfu-jiayuan,

Dongcheng District

Residence

Beijing, China 100062

Citizenship

China (People's Republic)

Mailing Address

Same as above

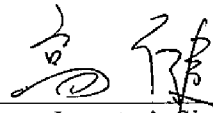
I, Xiongzhang Li (name of first witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC  
was personally present and did see **Lifeng Yang** (name of person signing the assignment), who  
is personally known to me, execute the above assignment.

Xiongzhang Li (signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC (location of witness signature)  
on this day, 4/9, 2018 (date of signature).

I, Jibang Dong (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.

Jibang Dong (signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, HaiDian, Beijing PRC (location of witness signature)  
on this day, 4/9, 2018 (date of signature).

Date: 2018. 4. 9

  
Inventor's Signature

Print full name of inventor

**Jian Gao**

Residence

8/F, Block D, Tsinghua Science Park

No.1 Zhongguancun East Road

Beijing, CN 100084

Citizenship

China (People's Republic)

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)  
on this day, 4/9, 2018 (date of signature).

I, Jibing Dong (name of second witness), whose residential address is  
71F, Block D, Tsinghua Science Park, Haidian Beijing, P.R.C  
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 71F, Block D, Tsinghua Science Park Haidian, Beijing, P.R.C (location of witness signature)  
on this day, 4/9, 2018 (date of signature).

Date: 2018.4.9 Xinlei Xu.  
Inventor's Signature

Print full name of inventor **Xinlei Xu**  
Residence 6-6-602, Tiantongyuan Zhong Yuan  
Beijing, China 100010  
Citizenship China (People's Republic)  
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, 4/9, 2018 (date of signature).

I, Jibing Dong (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.

Jibing Dong (signature of second witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian Beijing, P.R.C (location of witness/signature)  
on this day, 4/9, 2018 (date of signature).

Date: 2018.4.9

Ruiyong Jia  
Inventor's Signature

Print full name of inventor

**Ruiyong Jia**

Residence

Room 403, Building 27, No.105 North  
Beijing, China 100010

Citizenship

China (People's Republic)

Mailing Address

Same as above

I, Xiong Cheng 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.

Xiong Cheng Li (signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian Beijing PRC (location of witness signature)  
on this day, 4/9, 2018 (date of signature).

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

Jibing Dui (signature of second witness)  
Signed at 7/F Block D. Tsinghua Science Park. Haidian Beijing P.R.C (location of witness signature)  
on this day, 4/9, 2018 (date of signature).



Date: 2018. 4. 9

Liu Yousheng  
Inventor's Signature

Print full name of inventor

**Yousheng Liu**

Residence

Qiangyuan Road, Daxing District

Beijing, China 102600

China (People's Republic)

Citizenship

China (People's Republic)

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 **Yousheng Liu** (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, 4/9, 2018 (date of signature).

I, Jibing Dong (name of second witness), whose residential address is 7/F, Block D, Tsinghua Science Park Haidian Beijing P.R.C was personally present and did see **Yousheng Liu** (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 Haidian Beijing P.R.C (location of witness signature)  
on this day, 4/9, 2018 (date of signature).