

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6019702

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
RUIYONG JIA	12/23/2016
JIAN GAO	12/23/2016
LIFENG YANG	12/23/2016
XINLEI XU	12/23/2016
JIBING DONG	12/23/2016
<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>	16780315
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(508)366-4688
<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>Phone:</b>	508-616-2900
<b>Email:</b>	Docket@BainwoodHuang.com
<b>Correspondent Name:</b>	BAINWOOD, HUANG & ASSOCIATES, LLC
<b>Address Line 1:</b>	2 CONNECTOR ROAD
<b>Address Line 4:</b>	WESTBOROUGH, MASSACHUSETTS 01581
<b>ATTORNEY DOCKET NUMBER:</b>	1003-776.001
<b>NAME OF SUBMITTER:</b>	DAVID E. HUANG, ESQ.
<b>SIGNATURE:</b>	/David E. Huang, Reg. No. 39,229/
<b>DATE SIGNED:</b>	03/18/2020
<b>Total Attachments: 7</b>	
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ASSIGNMENT

**WHEREAS**, we, Ruiyong Jia, Jian Gao, Lifeng Yang, Xinlei Xu and Jibing Dong 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 MANAGING DATA ACCESS* (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 December 21, 2016 as U.S. Application No. 15/386,166;
- ☐ 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 (15/386,166 filed December 21, 2016) 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: 2016.12.23

Ruiyong Jia  
Inventor's Signature

Print full name of inventor

Ruiyong, Jia

Residence

Room 403, Unit 1, Building 27, 105 West, 3<sup>rd</sup> 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, 18/12, 2016 (date of signature).

I, Liu Yousheng (name of second witness), whose residential address is  
711, Block D, Tsinghua Science Park, Haidian Dist Beijing  
was personally present and did see Ruiyong, Jia (name of person signing the assignment), who is  
personally known to me, execute the above assignment.

Liu Yousheng (signature of second witness)  
Signed at Tsinghua Science Park (location of witness signature)  
on this day, 12.23, 2016 (date of signature).

Date: 2016/12/23 Jian Gao  
Inventor's Signature

Print full name of inventor **Jian Gao**  
Residence 7<sup>th</sup> Floor, Building #D, Tsinghua Science Park  
Zhongguancun Dong Road 1#, Haidian District  
100084 Beijing, CN  
Citizenship CN  
Mailing Address Same as above

I, Xiangcheng 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.

Xiangcheng Li (signature of first witness)  
Signed at 7/F, Block D, Tsinghua Science Park, Haidian, Beijing PRC (location of witness signature)  
on this day, 12/23, 2016 (date of signature).

I, Lia Yousheng (name of second witness), whose residential address is  
7/F, Block D, Tsinghua Science Park, Haidian, 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.

Lia Yousheng (signature of second witness)  
Signed at Tsinghua Science Park (location of witness signature)  
on this day, 12-23, 2016 (date of signature).

Date: 2016.12.23

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, 12/23, 20 16 (date of signature).

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

Liu Yousheng (signature of second witness)  
Signed at Tsinghua Science Park (location of witness signature)  
on this day, 12.23, 20 16 (date of signature).

Date: 12.23.2016 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, 12/23, 2016 (date of signature).

I, Liu Yousheng (name of second witness), whose residential address is  
71F Block D, Tsinghua Science Park Haidian Dist. 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.

Liu Yousheng (signature of second witness)  
Signed at Tsinghua Science Park (location of witness signature)  
on this day, 12.23, 2016 (date of signature).



Date: 2016-12-23

Jibing Dong

Inventor's Signature

Print full name of inventor

**Jibing Dong**

Residence

7/F, Block D, Tsinghua Science Park

100084 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 Jibing Dong (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, 12/23, 2016 (date of signature).

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

Liu Yousheng (signature of second witness)  
Signed at Tsinghua Science Park (location of witness signature)  
on this day, 12.23, 2016 (date of signature).