

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT4247477

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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>            |
| KENNETH DURAZZO   | 01/17/2017                       |
| <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>                    |
| <b>Application Number:</b>  | 15158013                         |
| <b>CORRESPONDENCE DATA</b>  |                                  |
| <b>Fax Number:</b>  | (631)393-6271                    |
| <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>   | 631-393-6270                     |
| <b>Email:</b>   | nyoffice@rml-law.com             |
| <b>Correspondent Name:</b>  | WILLIAM E. LEWIS                 |
| <b>Address Line 1:</b>  | RYAN, MASON & LEWIS, LLP         |
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| <b>ATTORNEY DOCKET NUMBER:</b>  | EMC-16-0112                      |
| <b>NAME OF SUBMITTER:</b>   | WILLIAM E. LEWIS                 |
| <b>SIGNATURE:</b>   | /william e. lewis/               |
| <b>DATE SIGNED:</b>   | 01/27/2017                       |
| <b>Total Attachments: 7</b>   |                                  |
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**ASSIGNMENT**

**WHEREAS**, we, Junping Zhao, Ricky Sun, Yu Cao, Kenneth Durazzo and Xiaoyan Guo, 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 **DATA PROCESSING AND DATA MOVEMENT IN CLOUD COMPUTING ENVIRONMENT**, 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 May 18, 2016 as U.S. Application No. 15/158,013;
- was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

**WHEREAS**, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company 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.

**IN TESTIMONY WHEREOF**, we have hereunto set our hands and affixed our seals as set forth below:

Date:

\_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of first inventor:

Junping Zhao

Residence:

Beijing, China

Citizenship:

China

Mailing Address:

8F, Block D, Tsinghua Science Park  
One East Zhongguancun Road, Haidian District  
Beijing, China 100084

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness #1 Signature

\_\_\_\_\_  
Witness #1 Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness #2 Signature

\_\_\_\_\_  
Witness #2 Print Name

Date:

\_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of second inventor:

Ricky Sun

Residence:

Beijing, China

Citizenship:

United States of America

Mailing Address:

8F, Block D, Tsinghua Science Park  
One East Zhongguancun Road, Haidian District  
Beijing, China 100084

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness #1 Signature

\_\_\_\_\_  
Witness #1 Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness #2 Signature

\_\_\_\_\_  
Witness #2 Print Name

Date:

\_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of third inventor:

Yu Cao

Residence:

Beijing, China

Citizenship:

China

Mailing Address:

8F, Block D, Tsinghua Science Park  
One East Zhongguancun Road, Haidian District  
Beijing, China 100084

\_\_\_\_\_  
Date

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Witness #1 Signature

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Witness #1 Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness #2 Signature

\_\_\_\_\_  
Witness #2 Print Name

Date: 1/17/17

[Signature]  
Inventor's Signature

Print full name of fourth inventor: Kenneth Durazzo  
Residence: San Ramon, California  
Citizenship: United States of America  
Mailing Address: 912 Woodland Drive  
San Ramon, California 94582

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF California  
COUNTY OF Santa Clara

On this 17<sup>th</sup> day of January, 2017, before me appeared Kenneth Durazzo who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

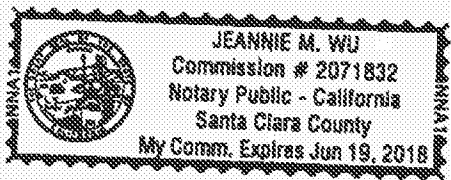
WITNESS my hand and official seal.

[Signature]

Notary Public

Print Name: Jeannie M. Wu

My Commission expires 6/19/2018





Date:

\_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of fifth inventor:

Xiaoyan Guo

Residence:

Beijing, China

Citizenship:

China

Mailing Address:

8F, Block D, Tsinghua Science Park  
One East Zhongguancun Road, Haidian District  
Beijing, China 100084

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Date

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Witness #1 Signature

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Witness #1 Print Name

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Date

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Witness #2 Signature

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Witness #2 Print Name