

## 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>
YING HU	07/20/2017
XIANGPING CHEN	07/20/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EMC IP HOLDING COMPANY LLC
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<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>	15656168
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<b>ATTORNEY DOCKET NUMBER:</b>	EMC-418PUS
<b>NAME OF SUBMITTER:</b>	MARIANNE M. DOWNING
<b>SIGNATURE:</b>	/Marianne M. Downing/
<b>DATE SIGNED:</b>	07/21/2017
<b>Total Attachments: 4</b>	
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## ASSIGNMENT

WHEREAS, we, Ying Hu and Xiangping Chen, 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: ONLINE METADATA BACKUP CONSISTENCY CHECK, and identified as Attorney Docket No. EMC-418PUS, 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 as U.S. Application No.;

☐ was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a Delaware limited liability company 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 me;

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;

PATENT  
Atty. Dckt. No.: EMC-418PUS  
Client Case No.: 108847

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 attorneys that we have appointed and EMC IP Holding Company LLC to insert here in parenthesis (15/656,163, 7-21-17) 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: 7/20/2017

[Signature]  
Inventor's Signature

Print full name of first inventor: Ying Hu  
Residence: 52 Little Pond Road  
Northborough, MA 01532  
Citizenship: United States  
Mailing Address: Same as above

I, ~~Ying~~ Xiu Zhu (name of first witness), whose residential address is  
75 Stratton Landing Apt 219 Medford, MA 02155  
was personally presented and did see Ying Hu who is personally known to me, execute the above assignment.

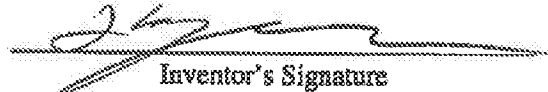
Xiu Zhu (signature of first witness)  
Signed at 228 South St, Hopkinton MA (location of witness signature)  
on this day 7/20, 2017 (date of witness signature)

I, Felix Shraiger (name of second witness), whose residential address is  
116 Tremont St #104 Brighton MA 02135  
was personally presented and did see Ying Hu who is personally known to me, execute the above assignment.

I, [Signature] (signature of second witness)  
Signed at 228 South St Hopkinton MA (location of witness signature)  
on this day 07/20/2017, 2017 (date of witness signature)

on this day 07/20/2017, 2017 (date of witness signature)

Date: 07/20/17

  
Inventor's Signature

Print full name of first inventor:

Xiangping Chen

Residence:

22 Harrington Ridge Road  
Sherborn, MA 01770

Citizenship:

United States

Mailing Address:

Same as above

I, Xiao Zhao (name of first witness), whose residential address is  
75 Station Landing Ave #19 Medford, MA  
was personally presented and did see Xiangping Chen who is personally known to me, execute the  
above assignment.

Xiao Zhao (signature of first witness)  
Signed at 228 South St. Hopkinton, MA (location of witness signature)  
on this day 07/20, 2017 (date of witness signature)

I, Felix Shwaiger (name of second witness), whose residential address is  
116 Tremont St. Brighton, MA - 02135  
was personally presented and did see Xiangping Chen who is personally known to me, execute the  
above assignment.

Felix Shwaiger (signature of second witness)  
Signed at 228 South St Hopkinton, MA (location of witness signature)  
on this day 07/20/2017, 2017 (date of witness signature)

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