

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4777796

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JAMES FEI WU	01/09/2018
COLIN ZOU	12/22/2017
SEAN YE	12/25/2017
LIN XIAO	01/10/2018
PENG WU	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:	15846370
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-16-0667.02
NAME OF SUBMITTER:	HOLLY VIGLIATURA
SIGNATURE:	/Holly Vigliatura/
DATE SIGNED:	01/16/2018
Total Attachments: 7	
source=Signed Assignment#page1.tif	
source=Signed Assignment#page2.tif	

source=Signed Assignment#page3.tif
source=Signed Assignment#page4.tif
source=Signed Assignment#page5.tif
source=Signed Assignment#page6.tif
source=Signed Assignment#page7.tif

ASSIGNMENT

WHEREAS, we, James Fei Wu, Colin Zou, Lin Xiao, Sean Cheng Ye, and Peng Wu, 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 (Application), the specification of which: **METHODS AND DEVICES FOR DATA DE-DUPLICATION**

☐ is being executed on even date herewith and is about to be filed in the United States Patent Office;

☒ was filed on December 19, 2017 as U.S. Application No. 15/846,370;

☐ 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 (15/846,370 filed December 19, 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: 1/9/2018

James Wu

Inventor's Signature

Print full name of inventor

James Fei Wu

Room 601, Unit 10, Building 15, Huajiadi

Residence

Beijing, China

Citizenship

China

Mailing Address

Same as above

I, Zhi Kong (name of first witness), whose residential address is
Zhejiang Province Hangzhou City Shi Shan Road 556
was personally present and did see James Fei Wu (name of person signing the assignment), who
is personally known to me, execute the above assignment.

Kong Zhi (signature of first witness)
Signed at 969 West Wen Yi Road, Yu Hang District Hangzhou (location of witness signature)
on this day, 1-9, 2018 (date of signature).

I, Cai Chang (name of second witness), whose residential address is
Zhejiang Province Hangzhou City Yulan Xuan 535
was personally present and did see James Fei Wu (name of person signing the assignment), who
is personally known to me, execute the above assignment.

Cai Chang (signature of second witness)
Signed at 969 West Wen Yi Road, Yu Hang District Hangzhou (location of witness signature)
on this day, 1-9, 2018 (date of signature).

Date: 12/22/2017

Colin Zou

Inventor's Signature

Print full name of inventor

Colin Zou

Residence

4038 Lick Mill Boulevard

Santa Clara, CA 95054

Citizenship

China

Mailing Address

Same as above

I, RAJEEV TIWARI (name of first witness), whose residential address is
1738 Silverwood drive, San Jose, CA 95124

was personally present and did see Colin Zou (name of person signing the assignment), who is personally known to me, execute the above assignment.

R Tiwari

(signature of first witness)

Signed at 5450 Great American Parkway (location of witness signature)

Santa Clara, CA 95054

on this day, 22nd Dec, 2018 (date of signature).

I, Shibin Zhang (name of second witness), whose residential address is
3260 Alessandro Dr., San Jose, CA 95135

was personally present and did see Colin Zou (name of person signing the assignment), who is personally known to me, execute the above assignment.

[Signature]

(signature of second witness)

Signed at 5450 Great American Parkway (location of witness signature)

Santa Clara, CA 95054

on this day, Dec. 22nd, 2018 (date of signature).

Date: 1/10/2018

Lin Xiao

Inventor's Signature

Print full name of inventor

Lin Xiao

Residence

Room 901, No.20, Yuequan Rd, Haidian District

Beijing, China 100084

Citizenship

China

Mailing Address

Same as above

I, Luo Jun (name of first witness), whose residential address is
No. 223, 1st Haide Rd, Nanshan District, Shenzhen, Guangdong, China
was personally present and did see Lin Xiao (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Luo Jun (signature of first witness)
Signed at No. 223, 1st Haide Rd, Nanshan District, Shenzhen, Guangdong, China (location of witness signature)
on this day, Jan, 11, 2018 (date of signature).

I, Tang Ziyao (name of second witness), whose residential address is
No. 223, 1st Haide Rd, Nanshan District, Shenzhen, Guangdong, China
was personally present and did see Lin Xiao (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Tang Ziyao (signature of second witness)
Signed at No. 223, 1st Haide Rd, Nanshan District, Shenzhen, Guangdong, China (location of witness signature)
on this day, Jan, 11, 2018 (date of signature).

Date: 12/25/2017

Sean Ye

Inventor's Signature

Print full name of inventor

Sean Cheng Ye

Residence

36-5-602, Donghuangchenfgen South St

Beijing, China 100006

Citizenship

China

Mailing Address

Same as above

I, Qi Chen (name of first witness), whose residential address is
20-6-1501, Huafangyiyuan, No 29 Qingnian Rd. Beijing
was personally present and did see **Sean Cheng Ye** (name of person signing the assignment),
who is personally known to me, execute the above assignment.

Qi Chen

(signature of first witness)

Signed at Dell EMC Beijing office (location of witness signature)
on this day, Dec. 25, 2018 (date of signature).

I, Ried Liu (name of second witness), whose residential address is
3-1-501, Longze Yuan, Changping District, Beijing
was personally present and did see **Sean Cheng Ye** (name of person signing the assignment),
who is personally known to me, execute the above assignment.

Ried Liu

(signature of second witness)

Signed at Dell EMC Beijing office (location of witness signature)
on this day, Dec. 25, 2018 (date of signature).

Date: _____

Inventor's Signature

Date: Jan. 9, 2018

Peng Wu

Inventor's Signature

Print full name of inventor

Peng Wu

Residence

33-3-303, East Block, long Xinyuan
Huilongguan, Changping District
Beijing, China 102208

Citizenship

China

Mailing Address

Same as above

I, Jun Wang (name of first witness), whose residential address is
1476 Caobao Road, Minhang District, Shanghai, China
was personally present and did see **Peng Wu** (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Jun Wang (signature of first witness)
Signed at 1198 Qin Zhou North Road, Xuhui District, Shanghai, China (location of witness signature)
on this day, Jan, 9, 2018 (date of signature).

I, Fei Zhou (name of second witness), whose residential address is
425 Lianhua Road, Minhang District, Shanghai, China
was personally present and did see **Peng Wu** (name of person signing the assignment), who is
personally known to me, execute the above assignment.

Fei Zhou (signature of second witness)
Signed at 1198 Qin Zhou North Road, Xuhui District, Shanghai, China (location of witness signature)
on this day, Jan, 9, 2018 (date of signature).