504861102 04/10/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HAIFANG ZHAI	02/26/2018
YUJIE ZHOU	02/26/2018
QINGQIANG GUO	02/26/2018
WEIDONG ZHOU	04/10/2018
WENJIN SERAPH XU	02/26/2018

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:	15846311

CORRESPONDENCE DATA

Fax Number:

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.

Email: Holly_Vigliatura@dell.com

Correspondent Name: EMC IP HOLDING COMPANY LLC

Address Line 1: 176 SOUTH STREET

Address Line 4: HOPKINTON, MASSACHUSETTS 01748

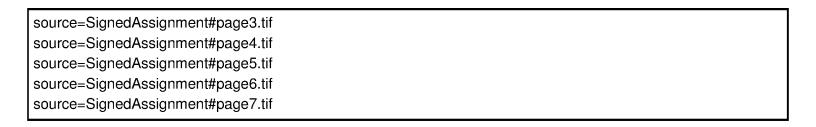
ATTORNEY DOCKET NUMBER:	EMC-16-0790.02
NAME OF SUBMITTER:	HOLLY VIGLIATURA
SIGNATURE:	/Holly Vigliatura/
DATE SIGNED:	04/10/2018

Total Attachments: 7

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> PATENT REEL: 045492 FRAME: 0764

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PATENT REEL: 045492 FRAME: 0765

PATENT/Joint Assignment Docket No.: EMC-16-0790.02

ASSIGNMENT

WHEREAS, we, Haifang Zhai, Yujie Zhou, Quingqiang Guo, Weidong Zuo and Wenjin Seraph Xu 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 A TOP COVER ARRANGEMENT FOR A STORAGE AND THE CORRESPONDING STORAGE (Application), the specification of which:

[]	is being executed on even date herewith and States Patent Office;	is about to be filed in the United	
[X]	was filed on December 19, 2017 as U.S. App	olication No. 15/846,311;	
Γ1	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,

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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 (15/846,311 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:

PATENT/Joint Assignment Docket No.: EMC-16-0790.02

Date: 2. 2.	Fluff elm.
	Inventor's Signature
Print full name of inventor	Haifang Zhai
Residence	2F Building #2, KIC plaza No 252 Songhu
·	No 252 Songhu Rd
•	Shanghai, China 200433
Citizenship	China
Mailing Address	Same as above
_	
I, Newid Dong (nam Flow 2. K2C2. Songhy Rd.	se of first witness), whose residential address is
	Chai (name of person signing the assignment), who
is personally known to me, execute the above	assignment.
David Pong Signed at Floor 2 kars Sorphy Rd. on this day, Feb. 26.	(signature of first witness) Sharehar PRC (location of witness signature) 2018 (date of signature).
I, Kujie Lhon (nam Floor 2 KW2 Songha	ne of second witness), whose residential address is Rd Maneyha: PRC.
was personally present and did see Haifang Z	hai (name of person signing the assignment), who
is personally known to me, execute the above	assignment.
Signed at Floor 2. 1820. Sough on this day, Tob. 3. A.	(signature of second witness) RC u Rd Sharf (secation of witness signature) 2018 (date of signature).
10,70	

PATENT/Joint Assignment Docket No.: EMC-16-0790.02

Date: 2018.226	Eugle Short.
	Inventor's Signature
Print full name of inventor	Yujie Zhou
Residence	Shanghai Yangpu District, 402 Room, 6 building
	No 318, Xiangyin
• •	Shanghai, China 200433
Citizenship	China
Mailing Address	Same as above
I, Dourd Pony (Floor 2 KZ12 Songhu Rd	name of first witness), whose residential address is
was personally present and did see Yujie	Zhou (name of person signing the assignment), who is
personally known to me, execute the abov	
_	
Navid Dong	(signature of first witness)
Signed at Floor 2 KIC2 Songhu Rd	Yangpu Sham han (location of witness signature)
on this day, Feb. 26	, 2018 (date of signature).
·	
I, Zhihofey (name of second witness), whose residential address is
was personally present and did see Yujie	Zhou (name of person signing the assignment), who is
personally known to me, execute the abov	
. 1 .	-
_ zhaha daj	(signature of second witness)
Signed at PRC. Shoryhi	(location of witness signature)
on this day, 2 %	, 2018 (date of signature).

Date: 20/8/02/26	Ciny slay Grus
, , , , , , , , , , , , , , , , , , ,	Inventor's Signature
Print full name of inventor	Qingqiang Guo
Residence	Shanghai Minhang District
	20-502Room, DongFangYuHuaYuan II 513-13 L
•	513-13 Longming Road
	Shanghai, China 201102
Citizenship	China
Mailing Address	Same as above
I, <u>Sophia</u> Shu (nam 2F. Building#2, No 752 Songhu	e of first witness), whose residential address is Dad, Shangha, PRC
	Guo (name of person signing the assignment),
who is personally known to me, execute the a	pove assignment.
Signed at No V52 Sorghu Road on this day, 2/26	(signature of first witness) Shougha: pp (location of witness signature) 2018 (date of signature).
I, LZO Zhang (nam 2P, Building #2 No 252 Songhu	ne of second witness), whose residential address is Road, Chansha' PRC
v	Guo (name of person signing the assignment),
who is personally known to me, execute the a	pove assignment.
0	
LZO Zhang	(signature of second witness)
Signed at No 252 Gonofiu Road, St	(signature of second witness) (an Shar' PRC (location of witness signature) 2018 (date of signature).
on this day, $2/26$,	2018 (date of signature).

PATENT/Joint Assignment Docket No.: EMC-16-0790.02

Date: 4/(~//8	/wVn/
Date.	Inventor's Signature
Print full name of inventor	Weidong Zuo
Residence	2A Whitehall Circle
	Shrewsbury, MA 01545
Citizenship	United States
Mailing Address	Same as above
1 To Ecneu Augloja	(name of first witness), whose residential address is
	eshua NH 0300
· · · · · · · · · · · · · · · · · · ·	ridong Zuo (name of person signing the assignment), who
is personally known to me, execute the Signed at 121 South Street	e above assignment(signature of first witness)(MakinMAOPUE (location of witness signature)
114	, 2018 (date of signature).
1, Rosser Provis 46 Sonner Lane, Hus	(name of second witness), whose residential address is
	sidong Zuo (name of person signing the assignment), who
is personally known to me, execute the	e above assignment(signature of second witness)
Signed at	(location of witness signature)
	, 2018 (date of signature).

Date: 2/26/2018	Wendin Xh
- / - 0	nventor's Signature
Print full name of inventor	Wenjin Seraph Xu
Residence	Shanghai Zhabei District
,	401 Room, NO.53, Lane 319 Liuying Road
	Shanghai, China 200433
Citizenship	China
Mailing Address	Same as above
I, <u>the Li</u>	(name of first witness), whose residential address is
No. ≥52#, Soughu Roli,	Europa Shaughar
was personally present and did see we	njin seraph (name of person signing the assignment),
who is personally known to me, execut	e the above assignment.
HILL	(cianature of first witness)
Signed at Alo 257# South Ro	Value of mst withess)
on this day, $\frac{70.3247}{20.8}$	(signature of first witness) 1, Yaugh, Shoughai (location of witness signature) , 2018 (date of signature).
•	
I, Huihong Xiong NO. 252 H. Songhu Road	(name of second witness), whose residential address is
was personally present and did see We	njin Seraph (name of person signing the assignment),
who is personally known to me, execut	e the above assignment.
Huihry Xiang Signed at 10. 252# Songhu F on this day, Feb. 26. 218	(signature of second witness) (signature of second witness) (location of witness signature) 2018 (date of signature).
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