PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIAN GAO	06/12/2016
HONGPO GAO	06/12/2016
JAMIN JIANBIN KANG	06/12/2016
GENG HAN	06/12/2016
XINLEI XU	06/12/2016

RECEIVING PARTY DATA

Name:	EMC CORPORATION
Street Address:	176 SOUTH STREET
City:	HOPKINTON
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16528286

CORRESPONDENCE DATA

Fax Number: (508)366-4688

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.

Phone: 508-616-2900

Email: Docket@BainwoodHuang.com

Correspondent Name: BAINWOOD, HUANG & ASSOCIATES, LLC

Address Line 1: 2 CONNECTOR ROAD

Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	1003-752.001	
NAME OF SUBMITTER:	DAVID E. HUANG, ESQ.	
SIGNATURE:	/David E. Huang, Reg. No. 39,229/	
DATE SIGNED:	08/26/2019	

Total Attachments: 7

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PATENT 505639049 REEL: 050162 FRAME: 0916

PATENT REEL: 050162 FRAME: 0917

ASSIGNMENT

WHEREAS, we, Jian Gao, Hongpo Gao, Jamin Jianbin Kang, Geng Han and Xinlei 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 MANAGING STORAGE ARRAY CONFIGURATION (Application), the specification of which:

	is being executed on even date herewith and is about to be filed in the United States Patent Office;
M	was filed on $\frac{7/31}{309}$ as U.S. Application No. $\frac{16/538,386}{386}$;
[]	was patented under U.S. Patent Noon

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts 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

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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 Corporation, to insert here in parenthesis (16/528, 286 (12/21/2019)) 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: 2016.6.12	Inventor's Signature
	Print full name of inventor	Jian Gao
	Residence	8th Floor, Building #D, Tsinghua Science Park Zhongguancun Dong Road 1#, Haidian District Beijing, CN
	Citizenship	CN
	Mailing Address	Same as above
7/1	I, Xiong chung hi (n Block D. Tsinghua Science Par was personally present and did see Jian Gar personally known to me, execute the above Xiong chang hi Signed at Tsinghua Science fon this day, Jun. 12	ame of first witness), whose residential address is A. No. 1 Earl Pool Haidian District Beijing Comme of person signing the assignment), who is assignment. — (signature of first witness) — (location of witness signature) —, 20 16 (date of signature).
7F B	was personally present and did see <u>Jian Gar</u> personally known to me, execute the above	(signature of second witness) Park (location of witness signature)
	on this day, Jun 12.	, 20 \mathcal{U} (date of signature).

Da	ite: 20/6.6.12	Lordpo Gao
·		Inventor's Signature
Pri	int full name of inventor	Hongpo Gao
Re	sidence	TSP 7FL, Zhongguancun East Road I Beijing, CN
Cit	tizenship	CN
Ma	ailing Address	Same as above
was		ame of first witness), whose residential address is o 1 Zhongga an can East Road Hardwan District Berjing Gao (name of person signing the assignment), who is assignment.
Sig on	Chargehang Li med at Tsinghua Science Pa this day, Jun. 12	(signature of first witness)(location of witness signature)(date of signature).
per — Sig	sonally known to me, execute the above	ame of second witness), whose residential address is No.

	Date: 20(6.(.12	「ない」 Inventor's Signature
	Print full name of inventor Residence	Jamin Jianbin Kang 13#902 Wenhui Yuan, Haidian Beijing, CN
	Citizenship Mailing Address	CN Same as above
7/F B	was personally present and did see Jamin Jis who is personally known to me, execute the	ame of first witness), whose residential address is O. I. Zhang guar cun Fact Pood, Hoidian District Beijing anbin Kang (name of person signing the assignment), above assignment. (signature of first witness) (location of witness signature) (date of signature).
7/7	who is personally known to me, execute the	ame of second witness), whose residential address is No. 1. Imaguantum fast Road, Haidian Privice B anbin Kang (name of person signing the assignment), above assignment. (signature of second witness) Pork (location of witness signature) , 20 16 (date of signature).

Date:	Inventor's Signature
Print full name of inventor	Geng Han
Residence	12-5-502, Xinlongcheng, Changping Beijing, CN
Citizenship	CN
Mailing Address	Same as above
was personally present and did see Geng Ha personally known to me, execute the above	n (name of person signing the assignment), who is
was personally present and did see Geng Ha personally known to me, execute the above	ime of second witness), whose residential address is a/k, No. 1. Zhong quantum Fast Road. Hardian. Distribit. F n (name of person signing the assignment), who is assignment. (signature of second witness) fark (location of witness signature) , 20_1b (date of signature).
	Print full name of inventor Residence Citizenship Mailing Address I, Xiongthery Li (na Block D. Tsinghua Science Park) was personally present and did see Geng Ha personally known to me, execute the above on this day, Jun. 12. I, Jihng Dry (na I) IIF Block D. Tsinghua Science fi was personally present and did see Geng Ha personally known to me, execute the above of the second

	Date: 2016.6.12.	Xinlei Xu.
		Inventor's Signature
	Print full name of inventor	Xinlei Xu
	Residence	6-6-602, Zhongyuan, Tiantongyuan, Changping Beijing, CN
	Citizenship	CN
	Mailing Address	Same as above
7f.Block.D.	was personally present and did see Xinlei X personally known to me, execute the above	ame of first witness), whose residential address is Zhorfguan Cun East Pood, Holdin District Beijing (u) (name of person signing the assignment), who is assignment. (signature of first witness) (location of witness signature) , 20_16 (date of signature).
F Bluck D	was personally present and did see Xinlei X personally known to me, execute the above	ame of second witness), whose residential address is howgown run. Fast Road, Haidian · Pretrint. BJ Ku (name of person signing the assignment), who is assignment. (signature of second witness)

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