505204487 11/26/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5251255

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUNPING ZHAO	10/24/2018
XIANGPING CHEN	10/23/2018

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:	16168941

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.

508-616-2900 Phone:

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:	1003-654	
NAME OF SUBMITTER:	DAVID E. HUANG, ESQ.	
SIGNATURE:	/David E. Huang, Reg. No. 39,229/	
DATE SIGNED:	11/26/2018	

Total Attachments: 6

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PATENT REEL: 047582 FRAME: 0676 505204487

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PATENT REEL: 047582 FRAME: 0677

Attorney Docket No.: 1003-654 Client Docket No.: 111678.01

ASSIGNMENT

WHEREAS, I, <u>Junping Zhao</u>, as the original inventor or an original joint inventor 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

VERSIONING A CONFIGURATION OF DATA STORAGE EQUIPMENT

which is further identified by Attorney Docket Number 1003-654;

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, MA, 01748, USA, 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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my 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

Attorney Docket No.: 1003-654

Client Docket No.: 111678.01

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

PATENT ASSIGNMENT Attorney Docket No.: 1003-654 Client Docket No.: 111678.01 Hus Date: Oct 24, Inventor's Signature Legal name of inventor: Junping Zhao Residence: 18/F, Block D, Tsinghua Science Park No. 1, Zhong Guan Cun East Road Beijing, 100084 China (People's Republic) Mailing Address: Same as Above Citizenship: CN (name) whose residential address is was personally present and did see <u>Junping Zhao</u> (name of person signing the assignment) who is personally known to me, execute the above assignment. Signed at of 20 10. (date of signature) on this day (name) whose residential address is was personally present and did see <u>Junping Zhao</u> (name of person signing the assignment) who is personally known to me, execute the above assignment.

(signature of second witness)

87, Buildry D, Tsireghua Sa Park (location of witness signature)

_____ of 20 <u>/8</u>. (date of signature)

Attorney Docket No.: 1003-654 Client Docket No.: 111678.01

ASSIGNMENT

WHEREAS, I, Xiangping Chen, as the original inventor or an original joint inventor 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

VERSIONING A CONFIGURATION OF DATA STORAGE EQUIPMENT

which is further identified by Attorney Docket Number 1003-654;

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, MA, 01748, USA, 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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my 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

Attorney Docket No.: 1003-654 Client Docket No.: 111678.01

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Attorney Docket No.: <u>1003-654</u> Client Docket No.: <u>111678.01</u>

Date: 10/23/18		
	Inventor's Signature	
Legal name of inventor:	Xiangping Chen	
Residence:	22 Harrington Ridge Road Sherborn, MA 01770 United States of America	
Mailing Address: Citizenship:	Same as Above US	
1 Svetlana Kronro 18 Wright Farm	concord MA (name) whose residential address is	
was personally present and did see Xiangping Chen (name of person signing the assignment) who is personally known to me, execute the above assignment.		
open	(signature of first witness)	
Signed at Hopkinton M	(location of witness signature)	
on this day $10/23$	of 20_/e (date of signature)	
1 Christopher Sayles 32 Griffin Rd, Francing	(name) whose residential address is hum, MA 0170)	
was personally present and did see	Xiangping Chen (name of person signing the n to me, execute the above assignment.	
Christophen Sayler	(signature of second witness)	
Signed at 228 South St, H	(location of witness signature)	
on this day Oct 23	of 20 <u>/8</u> . (date of signature)	