505946176 03/03/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JING YU	02/26/2020
MING ZHANG	02/26/2020
REN WANG	02/26/2020
WEIYANG LIU	02/26/2020
SCOTT RANDOLPH QUESNELLE	02/27/2020
MENGZE LIAO	02/26/2020

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:	16804085

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.

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Email: courtney.graves@chamberlainlaw.com

Correspondent Name: ALY Z. DOSSA

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ATTORNEY DOCKET NUMBER:	170360-054400US
NAME OF SUBMITTER: COURTNEY GRAVES	
IGNATURE: /Aly Z. Dossa/	
DATE SIGNED: 03/02/2020	

PATENT 505946176 REEL: 051991 FRAME: 0283

Total Attachments: 8 source=Assignment_170360-054400US#page1.tif source=Assignment_170360-054400US#page2.tif source=Assignment_170360-054400US#page3.tif source=Assignment_170360-054400US#page4.tif source=Assignment_170360-054400US#page5.tif source=Assignment_170360-054400US#page6.tif source=Assignment_170360-054400US#page7.tif source=Assignment_170360-054400US#page8.tif

PATENT REEL: 051991 FRAME: 0284

ASSIGNMENT

WHEREAS, we, Jing Yu, Ming Zhang, Ren Wang, Weiyang Liu, Scott Randolph Quesnelle and Mengze Liao 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 METHOD AND SYSTEM FOR EFFICIENT VIRTUAL MACHINE OPERATION WHILE RECOVERING DATA the specification of which:

[X]	States Patent Office;
[]	was filed onas U.S. Application No;
[]	was patented under U.S. Patent Noon

WHEREAS, EMC IP Holding Company LLC (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

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.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:	2020.2.26	- サ ジ
		Inventor's Signature
Print full	name of first inventor:	Jing Yu
Residence:		Shanghai, China
Citizenship:		China

Mailing Address: c/o EMC IP Holding Company LLC
176 South Street

Inventor's Signature

Print full name of second inventor:

Shanghai, China

Ming Zhang

Residence: Citizenship:

China

Mailing Address:

c/o EMC IP Holding Company LLC

176 South Street

Date: 26/02/2020	T.
	Inventor's Signature
Print full name of third inventor:	Ren Wang
Residence:	Shanghai, China
Citizenship:	China
Mailing Address:	c/o EMC IP Holding Company LLC
	176 South Street
	Hopkinton, Massachusetts 01748

Date: 2/26/2020	対成物
	Inventor's Signature
Print full name of fourth inventor:	Weiyang Liu
Residence:	Shanghai, China
Citizenship:	China
Mailing Address:	c/o EMC IP Holding Company LLC
	176 South Street
	Hopkinton, Massachusetts 01748

Date: /

FEB. 27 2020

Inventor's Signature

Print full name of fifth inventor:

Residence:

Citizenship:

Mailing Address:

Scott Randolph Quesnelle

Ontario, Canada

Canada

c/o EMC IP Holding Company LLC

176 South Street

Date:	e: <u>2/26/2020</u>	Mengze Liao
		Inventor's Signature

Print full name of sixth inventor: Mengze Liao

Residence: Shanghai, China

Citizenship: China

Mailing Address: c/o EMC IP Holding Company LLC

176 South Street