#### 504624143 11/02/2017

# PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT4670861

Electronic Version v1.1 Stylesheet Version v1.2

**SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT** 

### **CONVEYING PARTY DATA**

Name	Execution Date
XIANGPING CHEN	10/30/2017
ANTON KUCHEROV	10/30/2017
JUNPING ZHAO	11/01/2017
KEVIN XU	11/01/2017

#### 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:	15797324

### CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 7814019988 Email: mmc@dc-m.com

**Correspondent Name:** DALY, CROWLEY, MOFFORD & DURKEE, LLP

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Address Line 2: SUITE 301A

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ATTORNEY DOCKET NUMBER:	EMC-440PUS
NAME OF SUBMITTER:	DAVID W. ROUILLE
SIGNATURE:	/David W. Rouille/
DATE SIGNED:	11/02/2017

**Total Attachments: 6** 

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**PATENT** REEL: 044018 FRAME: 0834 504624143

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> PATENT REEL: 044018 FRAME: 0835

## ASSIGNMENT

WHEREAS, we, Xiangping Chen, Anton Kucherov, Junping Zhao and Kevin 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 VIRTUAL STORAGE DOMAIN FOR CONTENT ADDRESSABLE SYSTEM and identified as Attorney Docket No. EMC-440PUS, the specification of which:

[ ] is being execute	ed on even date	: herewith and	d is about to	be filed in	the United States
Patent Office;					
	. 1 30 0017	II C Anni	iantina No. 1	5707324	
[X] was filed on O	:tober 30, 2017	as U.S. App	(ICSHOUTAO: )	(3171327,	
	nder U.S. Paten	1 % T	22		

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a Delaware limited liability company 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 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, 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;

PATENT REEL: 044018 FRAME: 0836

PATENT Atty. Dekt. No.: EMC-440PUS Client Case No.: 109364.01

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 attorneys that we have appointed and EMC IP Holding Company LLC to insert here in parenthesis (Pat. Appl. No. 15797324 filed on October 30, 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 Atty. Dckt. No.: EMC-440PUS Client Case No.: 109364.01

Date: /0/30/17	<u> </u>
Date: 10//01.7	Inventor's Signature
Print full name of first inventor:	Xiangping Chen
Residence:	22 Harrington Ridge Road Sherborn, MA 01770
Citizenship:	United States
Mailing Address:	Same as above
i, <u>XIAo zhAo</u>	(name of first witness), whose residential address is
was personally presented and did see 2 above assignment.  You Zu (	Tard, MA, 02155, , (iangping Chen who is personally known to me, execute the
Signed at 228 South Co. History	On. MA (location of witness signature)
on this day /0/30	, 2017 (date of witness signature)
I, Felix Shugiger  16 Trenont St. #10:  was personally presented and did see >	(name of second witness), whose residential address is イパンドラインの4、111日 - O 2 1 3 5 <u>Kiangping Chen</u> who is personally known to me, execute the
above assignment.	
1103 A3	signature of second witness) <u>okin ton MA</u> (location of witness signature)
Signed at 228 South St Hop	OKIN TON IMA (location of witness signature)
on this day 10/30	, 2017 (date of witness signature)

PATENT Atty, Dckt. No.: EMC-440PUS Client Case No.: 109364.01

Date: 10/30/3017-	_ Muleron
	Inventor's Signature
Print full name of first inventor:	Anton Kucherov
Residence:	7 Congress Street, Apt. 4 Milford, MA 01757
Citizenship:	Israel
Mailing Address:	Same as above
i, <u>XIAO ZHAO</u>	(name of first witness), whose residential address is
75 Station Landing . Apr 219 was personally presented and did see above assignment.	Med ford MA. 02 US5. Anton Kucherov who is personally known to me, execute the
Xino Zhy.	_(signature of first witness)
Signed at 228 South St. H.	թ <u>ի ի լոր, MA</u> (location of witness signature)
	, 2017 (date of witness signature)
1, <u>Felix Shvaiger</u> 116 Tremont St. # 104	(name of second witness), whose residential address is  **Brighton NIA 02135  **Anton Kucherov** who is personally known to me, execute the
was personally presented and did see above assignment.	Anton Kucherov who is personally known to me, execute the
1, 203, 45	(signature of second witness) <u>HopkintonMf</u> (location of witness signature) , 2017 (date of witness signature)
Signed at 228 Journ Jr	Hope h Lon Will (location of witness signature)
on this day <u>10/30</u>	, 2017 (date of witness signature)

		PATENT
	Atty. Dc	kt. No.: EMC-440PUS
	_, Clien	t Case No.: 109364.01
	Z/, o/, i	0
Date: 2017 · 11 · 1	Zhav Junjo-	<u> </u>
	Inventor's/Signs	ldure
Print full name of first inventor:	Junping Zhao	
	People's Republic of China	
Residence:	Floor 8, Block D	
	Tsinghua Science Park	
	Haidan, Beijing, China, 100084	<b>4</b>
Citizenship:	China	
**************************************		
Mailing Address:	Same as above	
8		
***************************************	(name of first witness), whose reside	
8/F , Building D , Tringhua S was personally presented and did see Jun	vence Rank, Thongquay cun	Lest Road, Beiling
was personally presented and did see Jun	<u>oing Zhao</u> who is personally known t	o me, execute the V
above assignment.		
fer Chon (sig	mature of first witness)	
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Signed at Olf, Build Log / Singrua	X.646 12M8 (location of mime	ss signature)
Signed at 8/F, Burldstay 7, Tsinghua on this day 2017, 10.31	, 2017 (date of witness signat	ure)
•		
I, Franky Liu	(name of second witness), whose res	idential address is
s, I received Louis	of 17 , which is a second to the second to t	Lact Road Hairing
8/F Birilding D. Trung head was personally presented and did see Jun	Frience Lark Transferrance	MY DOST INMA
	one voso ano is betsousnà knomi t	o me, execute me
above assignment.		

I, Tranky him (signature of second witness)

Signed at SIF Building D, Tsunghua Science Park(location of witness signature)

on this day 10.1 , 2017 (date of witness signature)

//	Atty. Dekt. No.: EMC-440PUS Client Case No.: 109364.01	
Date:	Inventor's Signature	
Print full name of first inventor:	Kevin Xu	
Residence:	9 Chestnut Hill Warren, NJ 07059	
Citizenship:	United States	
Mailing Address:	Same as above	
was personally presented and did see Ke assignment.  (si Signed at 1844 box 44 Covwer Roll on this day 11117	(name of first witness), whose residential address is  FRASISA HELONG NO 07922  vin Xu who is personally known to me, execute the above  gnature of first witness)  AND NO (location of witness signature) , 2017 (date of witness signature)	
48 Cedar Law, Ashlaw was personally presented and did see Kerassignment.	(name of second witness), whose residential address is  A Poh, Move to be vin Xu who is personally known to me, execute the above	
I,	signature of second witness)  / Who - Wo (location of witness signature)  /, 2017 (date of witness signature)	

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