PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIANGPING CHEN	08/10/2017
DAVID MEIRI	08/10/2017
ANTON KUCHEROV	08/10/2017

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:	15662708

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	JOSEPH B. RYAN
SIGNATURE:	/joseph b. ryan/
DATE SIGNED:	08/10/2017

Total Attachments: 5

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> PATENT REEL: 043262 FRAME: 0077

ASSIGNMENT

WHEREAS, we, Xiangping Chen, David Meiri and Anton Kucherov, 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 TOKEN-BASED DATA FLOW CONTROL IN A CLUSTERED STORAGE SYSTEM, the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;
[X]	was filed on <u>July 28, 2017</u> as U.S. Application No. <u>15/662,708;</u>
[]	was patented under U.S. Patent No on

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, 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.

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

Date: 08/10/17	<u> </u>
	Inventor's Signature
Print full name of first inventor:	Xiangping Chen
Residence:	Sherborn, Massachusetts
Citizenship:	United States of America
Mailing Address:	22 Harrington Ridge Road
	Sherborn, Massachusetts 01770
1 William Strong	(name) whose residential address is
5 Kmala 2	De Wasterd Mr.
was personally present and did see Xia who is personally known to me, execut	ngping Chen (name of person signing the assignment)
Hospia	(signature of first witness)
Signed at <u>Hopkortin M</u>	(location of witness signature)
on this day <u>S 14</u>	
1 <u>Christopher Sayles</u>	(name) whose residential address is
	han, MA 01701
was personally present and flid see Xia who is personally known to me, execut	ngping unen (name of person signing the assignment)
Mutophy Supli	
Signed at <u>728 South Stuthe</u>	<u> </u>
on this day <u>August 10</u>	•

Date: 8/10/17	D. Meri
<u> </u>	Inventor's Signature
Print full name of second inventor:	David Meiri
Residence:	Somerville, Massachusetts
Citizenship:	United States of America
Mailing Address:	29 Highland Road
	Somerville, Massachusetts 02144
1 <u>William Stron</u>	(name) whose residential address is
was personally present and did see Day	(name) whose residential address is Western Mo id Meiri (name of person signing the assignment) who is
personally known to me, execute the ab	· · · · · · · · · · · · · · · · · · ·
	(signature of first witness)
Signed at hotels M	💫 (location of witness signature)
on this day <u>S//4</u>	_of 20[_7_(date of signature)
32 Griffin Rd Franci	id Meiri (name of person signing the assignment) who is
×	
Dridger Duft	(signature of second witness)
Signed at <u>228 South St. Ho</u>	<u>planton, MA</u> (location of witness signature)
on this day <u>Asgust 10</u>	· · · · · · · · · · · · · · · · · · ·

N.

Date: 8/6/17-	Maderov
	Inventor's Signature
Print full name of third inventor:	Anton Kucherov
Residence:	Milford, Massachusetts
Citizenship:	Israel
Mailing Address:	7 Congress Street, Apt. 4
e e e e	Milford, Massachusetts 01757
1 William Strong	(name) whose residential address is
5 Washbad	Or Westferd Ma
	on Kucherov (name of person signing the assignment)
WALE	
Signed at <u>Hopewton</u>	(location of witness signature)
on this day 8/14	
5 min 1 min	(name) whose residential address is
was personally present and did see Antowho is personally known to me, execute	haham MA 01701 of Kucherov (name of person signing the assignment) the above assignment.
Mistophe Leyla	
	<u>k. hyp. M.A.</u> (location of witness signature)
on this day <u>August 10</u>	of 20 <u>7</u> . (date of signature)