505005379 07/16/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WILLIAM R. STRONGE	07/16/2018

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:	16036195

CORRESPONDENCE DATA

Fax Number: (631)393-6271

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:nyoffice@rml-law.comCorrespondent Name:JOSEPH B. RYAN

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ATTORNEY DOCKET NUMBER:	111856.01
NAME OF SUBMITTER:	JOSEPH B. RYAN
SIGNATURE:	/joseph b. ryan/
DATE SIGNED:	07/16/2018

Total Attachments: 3

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PATENT 505005379 REEL: 046360 FRAME: 0389

PATENT/Sole Assignment Attorney Docket No.: 111856.01

ASSIGNMENT

WHEREAS, I, William R. Stronge, 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 STORAGE SYSTEM WITH REPLICATION PROCESS UTILIZING SIMULATED TARGET RESPONSES, the specification of which:

[X]	is being executed on even date States Patent Office;	herewith and is about to be filed in the United
[]	was filed on	as U.S. Application No;
[]	was patented under U.S. Patent	No

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 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 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, 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.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal as set forth below:

PATENT/Sole Assignment Attorney Docket No.: 111856.01

Date: 7 1/18	MINING PS	
	Inventor's Signature	
	v	
Print full name of sole inventor:	William R. Stronge	
Residence:	Westford, Massachusetts	
Citizenship:	United States of America	
Mailing Address:	5 Woodland Drive	
	Westford, Massachusetts 01886	
1 ARCHANA PARASHIS	(name) whose residential address is	
In CETON DR. SHREW	LBURY, NA 00545	
	liam R. Stronge (name of person signing the assignment)	
who is personally known to me, execut	e the above assignment.	
<u> Nacco</u>	(signature of first witness)	
Signed at HOPKINTON , MA	(location of witness signature)	
on this day <u>07 6 20 8</u> of 20 (date of signature)		
1 Ying Hu	(name) whose residential address is	
228-50-54-54-14-14-14-1-1-1-1-1-1-1-1-1-1-1-1-	- 52 little word od, Northborough MA 01532	
was personally present and did see William R. Stronge (name of person signing the assignment) who is personally known to me, execute the above assignment.		
	* *** *** * * **** **** * * * * * * *	
	(signature of second witness)	
Signed at 228 South St. 16pkm	(location of witness signature)	
on this day Tuly 16th	of 20 <u>6</u> . (date of signature)	