504330955 04/20/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEREMY J. O'HARE	01/19/2017
GUY ROSOSHANSKY	01/19/2017

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:	15395133

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:	1003-454	
NAME OF SUBMITTER:	DAVID E. HUANG, ESQ.	
SIGNATURE:	/David E. Huang/	
DATE SIGNED:	04/20/2017	

Total Attachments: 6

source=1003-454 - Executed Assignment Inv1#page1.tif source=1003-454 - Executed Assignment Inv1#page2.tif source=1003-454 - Executed Assignment Inv1#page3.tif source=1003-454 - Executed Assignment Inv2#page1.tif source=1003-454 - Executed Assignment Inv2#page2.tif

PATENT 504330955

REEL: 042083 FRAME: 0977

EPAS ID: PAT4377641

source=1003-454 - Executed Assignment Inv2#page3.tif

PATENT REEL: 042083 FRAME: 0978

PATENT ASSIGNMENT Attorney Docket No.: 1003-454

EMC Docket No.: EMC-16-0789

ASSIGNMENT

WHEREAS, I, Jeremy J. O'Hare, 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

MANAGING COMPRESSION BASED ON A COMPRESSION PROFILE OF HOST DATA INITIALLY RESIDING ON A SOURCE STORAGE ARRAY

which is further identified by Attorney Docket Number 1003-454;

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

> PATENT **REEL: 042083 FRAME: 0979**

PATENT ASSIGNMENT

Attorney Docket No.: 1003-454 EMC Docket No.: EMC-16-0789

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, 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.

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

REEL: 042083 FRAME: 0980

	PATENT ASSIGNMENT Attorney Docket No.: 1003-454 EMC Docket No.: EMC-16-0789
Date: 1/11/2017	Inventor's Signature
Legal name of inventor:	Jeremy J. O'Hare
Residence:	3 Appleseed Drive Westborough, MA 01581 United States of America
Mailing Address	Same as above
STATE/COMMONWEALTH OF OCCUPY OF On this 19 day of 00 day	Masachusetts Maduse , 2017, before me, the undersigned eremy J. O'Hare, proved to me through n, which were:
employee identification call driver's license; or (other) hown to	ard; Me
	scribed to the foregoing Assignment and the same as his/her free act and deed for the Notary Public Print Name: Nancy E. Buck Print Name:
	My Commission Expires 8 11/1 2017

PATENT

REEL: 042083 FRAME: 0981

PATENT ASSIGNMENT Attorney Docket No.: 1003-454

EMC Docket No.: EMC-16-0789

ASSIGNMENT

WHEREAS, I, <u>Guy Rososhansky</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

MANAGING COMPRESSION BASED ON A COMPRESSION PROFILE OF HOST DATA INITIALLY RESIDING ON A SOURCE STORAGE ARRAY

which is further identified by Attorney Docket Number 1003-454;

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

PATENT REEL: 042083 FRAME: 0982

PATENT ASSIGNMENT Attorney Docket No.: 1003-454

EMC Docket No.: EMC-16-0789

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, 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.

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

REEL: 042083 FRAME: 0983

PATENT ASSIGNMENT Attorney Docket No.: 1003-454 EMC Docket No.: EMC-16-0789 Date: 1/19/17 Inventor's Signature Legal name of inventor: Guy Rososhansky Residence: 13 Butternut Hill Drive Worcester, MA 01609 United States of America Mailing Address Same as above STATE/COMMONWEALTH OF **COUNTY OF** day of 20/7, before me, the undersigned notary public, personally appeared Guy Rososhansky, proved to me through satisfactory evidence of identification, which were: employee identification card; driver's license; or (other) KNWN to M to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

My Commission Expires 81112017

PATENT

REEL: 042083 FRAME: 0984

RECORDED: 04/20/2017