504129830 12/08/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BORIS KRONROD	11/10/2016
AYELET BIGER-LEVIN	12/07/2016
MAOR FRANCO	10/04/2016

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:	15274075

CORRESPONDENCE DATA

Fax Number: (203)255-6570

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.

Phone: 2032556560 Email: car@rml-law.com **Correspondent Name:** KEVIN M. MASON

Address Line 1: 1175 POST ROAD EAST Address Line 2: RYAN, MASON & LEWIS, LLP

Address Line 4: WESTPORT, CONNECTICUT 06880

ATTORNEY DOCKET NUMBER: EMC-16-0433 **NAME OF SUBMITTER:** KEVIN M. MASON SIGNATURE: /Kevin M. Mason/ **DATE SIGNED:** 12/08/2016

Total Attachments: 5

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PATENT REEL: 040602 FRAME: 0916 504129830

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PATENT REEL: 040602 FRAME: 0917

FORM PTO-1595 R (Rev.6-93)	RECORDATION FORM COVER SHEET PATENTS ONLY		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies) Boris Kronrod, Ayelet Biger- Additional name(s) of conveyin attached? Yes X No	Levin, Maor Franco	2. Name and address of Name: EMC IP Holdin Internal Address:	
3. Nature of conveyance: X Assignment Merge _ Security Agreement Chan _ Other Execution Date: November December 7, 2	nge of Name	•	uth Street ate: MA ZIP: 01748 as(es) attached? _ Yes <u>X</u> No
4. Application number(s) or pa If this document is being filed A. Patent Application No.(s) 1 Additional numbers attach	together with a new ap	. •	date of the application is:
5. Name and address of party of correspondence concerning door mailed: Name: Kevin M. Mason Internal Address: Ryan, Mason Street Address: 1175 Post Road City: Westport State: CT ZIP	to whom cument should be n & Lewis, LLP I East, 2 nd Floor	6. Total number of apinvolved: _1 7. Total Fee (37 CFR 3 Enclosed Authorized to be 68. Deposit account num	.41) \$ <u>0.00</u> charged to deposit account
9. Statement and signature. To the best of my knowledge and true copy of the original docume	l belief, the foregoing in ent.	formation is true and co	rrect and any attached copy is a
Kevin M. Mason Reg. No. 36 597	/Kevin M. Mason/		December 8, 2016 Date

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EMC-16-0433

PATENT/Joint Assignment Attorney Docket No.: EMC-16-0433

ASSIGNMENT

WHEREAS, we, Boris Kronrod, Ayelet Biger-Levin, and Maor Franco, 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 METHODS AND APPARATUS FOR PROTECTING AGAINST SUSPICIOUS COMPUTER OPERATIONS USING MULTI-CHANNEL PROTOCOL, 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 September 23, 2016 as U.S. Application No. 15/274,075;
[]	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,

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:

11/40/16

Date Borjs Kronrod

On this day of day of 2016, 2016, before me personally came Boris Kronrod, to me known to be the individual who executed the foregoing instrument, and acknowledged execution of the same.

Witness 1:

1110116

Date

Name

Signatura

LINGER

Witness 2:

1//0/16 Date Name

Signature

llaire M.Co.

12/7/2016 Date	Ayelet Biger-Levin
On this 7th day of country, 2016 known to be the individual who executed of the same.	_, before me personally came Ayelet Biger-Levin, to me the foregoing instrument, and acknowledged execution
Witness 1: 1217116 Date	Elain Magary Name Signature
Witness 2: $\frac{12}{7} \frac{7}{6}$ Date	Laural Gately Name Laural Galol Signature
M. Moc.	

10/4/2016 Date	Maor Franco
On this day of october, 20 known to be the individual who executed the of the same.	6, before me personally came Maor Franco, to me he foregoing instrument, and acknowledged execution
Witness 1: 10/7/16	Name Name
Date Witness 2:	SENIS KNSAZIHHIN
Oct 7 1, 2016 Date	Name Signature Name

RECORDED: 12/08/2016