504144995 12/14/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4184841

SUBMISSION TYPE:		NEW ASSIGNMENT	
ATURE OF CONVEYA	NCE:	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ		
		Name	Execution Date
DAVID MEIRI			11/29/2016
XIANGPING CHEN			11/29/2016
WILLIAM R. STRONGE			11/29/2016
FELIX SHVAIGER			12/14/2016
RECEIVING PARTY DA	TA		
Name:	EMC IP HOLDING COMPANY LLC		
Street Address:	176 SC	OUTH STREET	
City:	НОРКІ	INTON	
State/Country:	MASS	ACHUSETTS	
	01748		
Postal Code: PROPERTY NUMBERS Property Type		Number	
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PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	Total: 1 PATA e sent to	Number 15280620 o the e-mail address first; if that is unsucced; if that is unsuccessful, it will be sent via 5082936774 amanda.bernier@emc.com AMANDA BERNIER, PARALEGAL 176 SOUTH STREET	
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ASSIGNMENT

WHEREAS, we, David Meiri, Xiangping Chen, William R. Stronge and Felix Shvaiger 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 *LAYOUT-INDEPENDENT CRYPTOGRAPHIC STAMP OF A DISTRIBUTED DATASET* (Application), 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 29, 2016 as U.S. Application No. 15/280,620;
- [] was patented under U.S. Patent No. ______on_____.

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts 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;

AND, we hereby authorize our attorneys, EMC IP Holding Company LLC, to insert here in parenthesis (15/280,620) 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 REEL: 040732 FRAME: 0924

17,312,016 Date: \\

Inventor's Signature

Print full name of inventor Residence

Citizenship Mailing Address David Meiri 392 Franklin Street, #2 Cambridge, MA 02139 IL, US Same as above

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

On this <u>a</u> May of <u>NUXMDEX</u>, 20<u>10</u> then personally appeared before me the above-named <u>David Meiri</u> known to me through satisfactory evidence of identification [_] employee identification card; [X] driver's license; [_] (other)_______ 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.

Notary Public

Print Name: Am reier My Commission expires()5/10/2021

AMANDA M. BERNIER Notary Public MONWEALTH OF MASSACIRUS Commission Expires May 14, 2021

PATENT REEL: 040732 FRAME: 0925

PATENT/Joint Assignment EMC Docket No.: EMC-16-0463

Date: U/29/16

Inventor's Signature

Print full name of inventor Residence

Citizenship Mailing Address Xiangping Chen 22 Harrington Ridge Road Sherborn, MA 01770 CN, US Same as above

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Notary Public Print Name: HYYO My Commission expires

	AMANDA M. BERNIER
<i>.</i>	Motory Public
	COMMONNEAUTH OF MASSACRASETTE
1 \\\ <i>\\</i>	My Commission Expires
6 1994	·

11/27/16 Date:

Inventor's Signature

Print full name of inventor Residence

Citizenship Mailing Address William R. Stronge 5 Woodland Drive Westford, MA 01886 US Same as above

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

On this <u>South</u> day of <u>November</u>, 20<u>4</u>, then personally appeared before me the above-named <u>William R. Stronge</u> known to me through satisfactory evidence of identification [1] employee identification card; [1] driver's license; [1] (other) _________ 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.

Notary Public Print Name: Hmnir hambernier My Commission expires 05 14/2



PATENT REEL: 040732 FRAME: 0927

Date: 12/14/2016

Inventor's Signature

Print full name of inventor Residence

Citizenship

Mailing Address

Felix Shvaiger 116 Tremont Street, Apt. 104 Brighton, MA 02135 IL Same as above

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

On this <u>up</u> day of <u>cemple</u>, 20<u>4</u> then personally appeared before me the above-named <u>Felix Shvaiger</u> known to me through satisfactory evidence of identification <u>satisfactory</u> evidence of identif

Notary Public

nier Print Name: My Commission expires



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