Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Piers BOWNESS	03/28/2013
Paul A. DENNIS	03/28/2013

RECEIVING PARTY DATA

Name:	EMC Corporation
Street Address:	176 South Street
City:	Hopkinton
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13853207

CORRESPONDENCE DATA

Fax Number: 5083664688

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 508-616-2900

Email: docket@bainwoodhuang.com

Correspondent Name: M. Ari Behar, Esq.

Address Line 1: Bainwood, Huang & Associates, Inc.

Address Line 2: 2 Connector Road

Address Line 4: Westborough, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	1048-188
NAME OF SUBMITTER:	M. Ari Behar, Esq.
Signature:	/Michael Ari Behar #58,203/
Date:	05/30/2013

502365535 PATENT REEL: 030514 FRAME: 0001

13853207

CH \$40,00

Total Attachments: 6 source=1048-188 - Assignment#page1.tif source=1048-188 - Assignment#page2.tif source=1048-188 - Assignment#page3.tif source=1048-188 - Assignment#page4.tif source=1048-188 - Assignment#page5.tif source=1048-188 - Assignment#page6.tif

PATENT REEL: 030514 FRAME: 0002

Attorney Docket No.: 1048-188 EMC Docket No.: EMC-12-818

ASSIGNMENT

WHEREAS, I, <u>Piers Bowness</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

TOKEN-BASED KEY GENERATION

which is further identified by Attorney Docket Number 1048-188;

WHEREAS, EMC Corporation (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 St., 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 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

Attorney Docket No.: 1048-188 EMC Docket No.: EMC-12-818

interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

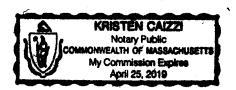
AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

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

Attorney Docket No.: 1048-188 EMC Docket No.: EMC-12-818

3/28/2013 Date: Legal name of inventor: Piers Bowness Residence: 185 Middle Rd. Boxborough, MA 01719 Citizenship: US Mailing Address: Same as above STATE/COMMONWEALTH OF **COUNTY OF** On this day of ______, 2013, then personally appeared before me the above-named Piers Bowness known to me through satisfactory evidence of 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:



My Commission expires 4 /25 /2

Attorney Docket No.: 1048-188 EMC Docket No.: EMC-12-818

ASSIGNMENT

WHEREAS, I, <u>Paul A. Dennis</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

TOKEN-BASED KEY GENERATION

which is further identified by Attorney Docket Number 1048-188;

WHEREAS, EMC Corporation (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 St., 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 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

Attorney Docket No.: 1048-188

EMC Docket No.: EMC-12-818

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 (13/853 207 Morch 29 2013 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:

Attorney Docket No.: 1048-188

EMC Docket No.: EMC-12-818

Date: 3/28/2013

Inventor's Signature

Legal name of inventor:

Paul A. Dennis

Residence:

8 Eden Rd.

Wayland, MA 01778

Citizenship:

US

Mailing Address:

Same as above

STATE/COMMONWEALTH OF

COUNTY OF

On this day of ______, 2013, then personally appeared before me the above-named Paul A. Dennis known to me through satisfactory evidence of identification [V] employee identification card; $[\]$ 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:

My Commission expires \(\triangle \)

