#### 503383554 07/08/2015

# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3430176

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ARI JUELS	07/06/2015
RONALD L. RIVEST	10/30/2014
NIKOLAOS TRIANDOPOULOS	10/31/2014

# **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:	14477152

# CORRESPONDENCE DATA

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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.com **Correspondent Name:** JOSEPH B. RYAN

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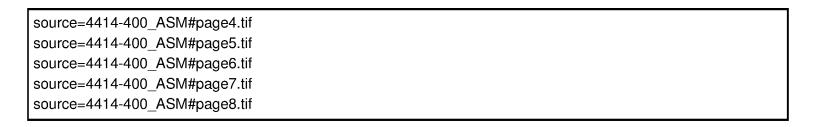
Address Line 2: RYAN, MASON & LEWIS, LLP Address Line 4: MELVILLE, NEW YORK 11747

ATTORNEY DOCKET NUMBER:	EMC-13-1267
NAME OF SUBMITTER:	JOSEPH B. RYAN
SIGNATURE:	/joseph b. ryan/
DATE SIGNED:	07/08/2015

# **Total Attachments: 8**

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> **PATENT** REEL: 036028 FRAME: 0147 503383554



PATENT REEL: 036028 FRAME: 0148

#### ASSIGNMENT

WHEREAS, we, Kevin D. Bowers, Vihang P. Dudhalkar, Ari Juels, Ronald L. Rivest, Samir Saklikar and Nikolaos Triandopoulos, 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 AUTHENTICATION BASED ON USER-SELECTED IMAGE OVERLAY EFFECTS, 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 4, 2014 as U.S. Application No. 14/477,152;
[]	was patented under U.S. Patent No on

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 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:

Date:	
	Inventor's Signature
Print full name of first inventor:	Kevin D. Bowers
Residence:	Melrose, Massachusetts
Citizenship:	United States of America
Mailing Address:	249 Tremont Street
	Melrose, Massachusetts 02176
STATE/COMMONWEALTH OF COUNTY OF	
employee identification card; [] drive the person whose name is subscribed to	, 20, then personally appeared before me the to me through satisfactory evidence of identification [ to be of the foregoing Assignment and acknowledged that he/she ad deed for the purposes therein contained.
	Notary Public
	Print Name:
	My Commission expires//

Date:	
	Inventor's Signature
Print full name of second inventor:	Vihang P. Dudhalkar
Residence:	Mumbai, India
Citizenship:	India
Mailing Address:	F/22 Neeta Apartments Chaphekar Road Mulund(East) Mumbai, India 400081
Date	Witness #1 Signature
	Witness #1 Print Name
Date	Witness #2 Signature
	Witness #2 Print Name

PATENT/Joint Assignment Aftorney Ducket No. 1514-15-1267

Date:	/ Inventor's Signature
Print full name of third inventor: Residence: Citizenship: Mailing Address	Art Juels Brookline, Massachusetts United States of America 55 Station Street, Apt. 3B Brookline, Massachusetts 02445
STATE/COMMONWEALTH OF COUNTY OF	NA Water
employee identification card; [2] dri the person whose name is subscribed	201 then personally appeared before me the through satisfactory evidence of identification [ ] ver's license; [ ] (other)

PATENT REEL: 036028 FRAME: 0153

Date: 10 30/14	Monald L. Kwest
	Inventor's Signature
Print full name of fourth inventor:	Ronald L. Rivest
Residence:	Arlington, Massachusetts
Citizenship:	United States of America
Mailing Address:	41 Academy Street
	Arlington, Massachusetts 02476
COUNTY OF <u>Mid</u> On this <u>304</u> day of <u>October</u> ,	2014, then personally appeared before me the through satisfactory evidence of identification []
the person whose name is subscribed to the for executed the same as his/her free act and deed	regoing Assignment and acknowledged that he/she
	1000
wind A. TO	Notary Public
LILL STON STONE ST	Print Name: DO MAN TUNGS
	My Commission expires (12/22/2019

Date:	
	Inventor's Signature
Print full name of fifth inventor:	Samir Saklikar
Residence:	Bangalore, Karnataka, India
Citizenship:	India
Mailing Address:	B-206, Aishwarya Amaze Devarachikanahalli Main Rd Bomannahalli Bangalore, Karnataka, India 560076
Date	Witness #1 Signature
	Witness #1 Print Name
Date	Witness #2 Signature
	Witness #2 Print Name

Date: October 4, 2014	1 de la companya della companya della companya de la companya della companya dell
· ·	Inventor's Signature
Print full name of sixth inventor:	Nikolaos Triandopoulos
Residence:	Arlington, Massachusetts
Citizenship:	United States of America
Mailing Address:	73 Bartlett Avenue
	Arlington, Massachusetts 02476
On this 3/9 day of 0/10 be 6 above-named Nikolaos Triandopoulos identification [ ] employee identification [ ] to be the po	Masso Chusets  Masso
	My Commission expires $4/9/262$ (



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