### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ALMA DIMNAKU	08/30/2013
MALAK ALSHAWABKEH	09/05/2013
ADNAN SAHIN	09/03/2013

### **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:	13870262

## **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	EMS-505US
NAME OF SUBMITTER:	ANNE E. SATURNELLI
Signature:	/Anne E. Saturnelli/
Date:	10/04/2013
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#### ASSIGNMENT

WHEREAS, we, Sean C. DOLAN, Dana NAAMAD, Alma DIMNAKU, Malak ALSHAWABKEH and Adnan SAHIN 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 IDENTIFYING GROUPS OF SIMILAR DATA PORTIONS, 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 April 25, 2013 as U.S. Application No. 13/870,262;
[]	was patented under U.S. Patent Noon

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;

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States to issue such Letters Patent as shall thereon to said ASSIGNEE, its successors,	be granted upon said application, assigns, and legal representat	on or applications based
AND, we hereby authorize attorney parenthesis (	) the a counterpart application) to faci	
IN TESTIMONY WHEREOF, w set forth below:	e have hereunto set our hands	and affixed our seals as
Date:		
	Inventor's	Signature
Print full name of first inventor: Residence:	Sean C. DOLAN  29 Dariéne Drive	
Citizenship: Mailing Address:	Southborough, MA 01772 U.S.A. Same	
STATE OF MASSACHUSETTS COUNTY OF		
		en de la companya de La companya de la co
On this day of, 2013, the sean C. BOLAN known to me through satisfication card; [] driver's license; [ be the person whose name is subscribed to	tisfactory evidence of identific	eation [ ] employee
he/she executed the same as his/her free ac	the foregoing Assignment and t and deed for the purposes the	l acknowledged that erein contained.
	Notary Public	
	Print Name:	ing Paggarian Sangarian Sangarian Paggarian Sangarian Sangarian
	My Commission expires:	

AND, we do hereby authorize and request the Commissioner of Patents of the United

Date:		
	Inventor's Signa	ture
Print full name of second inventor:	Dana NAAMAD	
Residence:	84 Beals Street #2 Brookline, MA 02446	
Citizenship:	U.S.A.	
Mailing Address:	Same	
STATE OF MASSACHUSETTS		
COUNTY OF		
On this, 2013  Dana NAAMAD known to me through identification card; [] driver's license; be the person whose name is subscribed he/she executed the same as his/her free	satisfactory evidence of identification [] (other) to the foregoing Assignment and ackr	employee to
more executed the same as morter free	act and deed to the purposes dierent	comanics.
		in the many and the state of th
	Notary Public	
	Print Name:	
	My Commission expires:	

Date: <u>8-30-2013</u>	Alma Dimudae
	Inventor's Signature
Print full name of third inventor: Residence: Citizenship: Mailing Address:	Alma DIMNAKU 57 Pine Plain Road Wellesley, MA 02481 U.S. A. Same
STATE OF MASSACHUSETTS  COUNTY OFM;))\esex	••••
Alma DIMNAKU known to me through satis identification card; [X] driver's license; [ ]	e foregoing Assignment and acknowledged that
	Notary Public
	Print Name: Tress Goodwal
	My Commission expires: April 9, 2015
TREVOR GARDNER Nosary Public, Commonwealth of Massachusetts My Commission Expires April 09, 2016	

On this 5 day of September 2013, then personally appeared before me the above-named Malak ALSHAWABKEH known to me through satisfactory evidence of identification [x] 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: Linda N. Valancola.

My Commission expires:

LINDA M, VALANZOLA
Notery Public
COMMONWEAUTH OF RASSACHUSETTS
My Commission Expires

.5.

Date: Sept 3, 2013	Adu S.
	Inventor's Signature
Print full name of fifth inventor: Residence:	Adnan SAHIN 140 Pine Grove St Needham, MA 02404
Citizenship: Mailing Address:	U.S.A. Same
STATE OF MASSACHUSETTS COUNTY OF THE COUNTY OF	
Adnan SAHIN known to me through satisfac identification card; driver's license; be the person whose name is subscribed to the he/she executed the same as his/her free act at	(other) KNOW to MEto foregoing Assignment and acknowledged that