PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Gregory W. Lazar	12/18/2009
Greg Mogavero	12/18/2009
Michael Hamel	12/18/2009
Yidong Wang	12/18/2009
Prakash Chanderia	12/18/2009
Feng Zhou	12/18/2009
Ashwin Ramkrishna Tidke	12/19/2009

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:	12645857

CORRESPONDENCE DATA

Fax Number: (508)366-4688

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

Phone: 508-616-2900

Email: Docket@BainwoodHuang.com

Correspondent Name: Bainwood, Huang & Associates, LLC

Address Line 1: 2 Connector Road

Address Line 4: Westborough, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER: 1003-099

PATENT REEL: 023906 FRAME: 0773 12645857

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NAME OF SUBMITTER:	David E. Huang, Esq.	
Total Attachments: 17		
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PATENT REEL: 023906 FRAME: 0774

ASSIGNMENT

WHEREAS, we, Gregory W. Lazar, Greg Mogavero, Michael Hamel, Yidong Wang, Prakash Chanderia, Feng Zhou and Ashwin Ramkrishna Tidke 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 PROVIDING SECURE ACCESS TO A SET OF CREDENTIALS WITHIN A DATA SECURITY MECHANISM OF A DATA STORAGE SYSTEM the specification of which:

[X]	is being executed on even date he United States Patent Office;	rewith and is about to be filed in the
[]	was filed on;	as U.S. Application No.
[]	was patented under U.S. Patent No	oon

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;

> PATENT REEL: 023906 FRAME: 0775

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 paten 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 Bainwood Huang & Associates LLC to insert here in parentheses (__/2/645,857 __filed__/23/2009____) 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:

Date: 12)18/2001	- Dungly L. M
, ,	₫/hylentor's Signature
Print full name of first inventor:	Gregory W. Lazar
Residence:	10 Rockdale Hill Circle
	Upton, MA 01568
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	Massachusetts Harces tu
me the above-named Gregory W. Identification employee identi the foregoing Assignment and ack	, 2009, then personally appeared before Lazar known to me through satisfactory evidence of fication card; driver's license; (other) to be the person whose name is subscribed to knowledged that he/she executed the same as his/her
free act and deed for the purpose	s therein contained.
	Motary Public
	Print Name: Nancy S- Forrister My Commission expires 0/1 301 2015

Date: 12 /18 /2009	Suz Mogavero Inventor's Signature	
	Inventor's Signature	
Print full name of second inventor:	Greg Mogavero	
Residence:	128 Ardmore Road	
	Needham, MA 02494	
Citizenship:	United States of America	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF Massachusetts COUNTY OF Stancestur		
	, 2009, then personally appeared before	
identification employee identification	own to me through satisfactory evidence of card; [driver's license; [] (other) to be the person whose name is subscribed to	
the foregoing Assignment and acknowled free act and deed for the purposes therein	ged that he/she executed the same as his/her n contained.	
	Plancy J. Forester	
	Notary Public	
	Print Name: Nancy J- Fornstor	
	My Commission expires <u>O(130130/</u> 5	

Date: 12/18/2009	Michael Hand	
	Inventor's Signature	
Print full name of third inventor:	Michael Hamel	
Residence:	50 Bowdoin Drive	
	Milford, MA 01757	
Citizenship:	United States of America	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF MASS	sachusotts	
On this // day of // day o		
the foregoing Assignment and acknowled free act and deed for the purposes therein	ged that he/she executed the same as his/her contained.	
	Hancy Jassester Notary Public	
	Print Name: Nancy J. Farrister My Commission expires 0113013015	
	try Commission Explica <u>er</u> / <u>De</u> / <u>De</u> G	

Date: 12/18/2009	1200
	Inventor's Signature
Print full name of fourth inventor:	Yidong Wang
Residence:	33 Howarth Drive
	Upton, MA 01568
Citizenship:	P.R. China
Mailing Address:	Same as above
STATE/COMMONWEALTH OF Z	Nassachusetts Drucestu
On this /8 day of <u>Jeembe</u> me the above-named Yidong Wang identification [] employee identific	2009, then personally appeared before known to me through satisfactory evidence of ation card; driver's license; () (other) to be the person whose name is subscribed to
the foregoing Assignment and acknowledge act and deed for the purposes to	owledged that he/she executed the same as his/her herein contained.
	Hancy Jarreter Notary Public
	Print Name: Nancy J. Formster My Commission expires 0/1301-2015

Date: 12/18/09	Condens
	Inventor's Signature
Print full name of fifth inventor:	Prakash Chanderia
Residence:	70 Commons Drive, Apt. 55
	Shrewsbury, MA 01545
Citizenship:	India
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	Mysachusotts Braxesfer
me the above-named Prakash Cha	, 2009, then personally appeared before inderia known to me through satisfactory evidence of cation card; [] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and ackr free act and deed for the purposes	nowledged that he/she executed the same as his/her
	Hancy J- Forrester
	Notary Public
	Print Name: Nancy J. Farrister
	My Commission expires 0/1301 20/

Date: 12/18/2009	m
	Inventor's Signature
Print full name of sixth inventor:	Feng Zhou
Residence:	1640 Worcester Road, 518D
	Framingham, MA 01702
Citizenship:	China
Mailing Address:	Same as above
STATE/COMMONWEALTH OF MAN	sachusotts ncesta
On this day of day of me the above-named Feng Zhou known identification employee identification to	
	lged that he/she executed the same as his/her
ne with the	Hancy Farrister
	Notary Public
	Print Name: Nancy S. Forrister
	My Commission expires <u>01130130</u> 15

Date:		
	Inventor's Signature	
Print full name of seventh inventor:	Ashwin Ramkrishna Tidke	
Residence:	307, Sunita Apartments, Plot 101, Sector-14 Koparkhairane, Navi Mumbai 400709	
Citizenship:	India	
Mailing Address:	Same as above	
TWO WITNESSES:		
1. Signature	2. Signature	
Full Name	Full Name	
Address	Address	
·		
On this day of, 2009, then personally appeared before me the above-named Ashwin Ramkrishna Tidke known to me through satisfactory evidence of identification [] 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:	

ASSIGNMENT

WHEREAS, we, Gregory W. Lazar, Greg Mogavero, Michael Hamel, Yidong Wang, Prakash Chanderia, Feng Zhou and Ashwin Ramkrishna Tidke 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 PROVIDING SECURE ACCESS TO A SET OF CREDENTIALS WITHIN A DATA SECURITY MECHANISM OF A DATA STORAGE SYSTEM the specification of which:

	is being executed on even date here United States Patent Office;	ewith and is about	to be filed in the
	was filed on a	s U.S. Application	No.
<u>-</u>	was patented under U.S. Patent No	-	on

PALANDE ASHOK RAMRAO LUNE AREA Regd. No. 1825

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;

> PATENT REEL: 023906 FRAME: 0784

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 Bainwood Huang & Associates LLC to insert here in parentheses (12/645, 857 filed 12/32009) 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: 023906 FRAME: 0785

Date:	
	Inventor's Signature
Print full name of first inventor:	Gregory W. Lazar
Residence:	10 Rockdale Hill Circle
	Upton, MA 01568
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
COUNTY OF	
me the above-named Gregory W. La	, 2009, then personally appeared before azar known to me through satisfactory evidence of ation card; [] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and acknowledge act and deed for the purposes the	welledged that he/she executed the same as his/her
	Notary Public
	Print Name:
	My Commission expires/_/

Date:	
	Inventor's Signature
Print full name of third inventor:	Michael Hamel
Residence:	50 Bowdoin Drive
	Milford, MA 01757
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	
me the above-named Michael Hamel	, 2009, then personally appeared before I known to me through satisfactory evidence of the lition card; [] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and ackno free act and deed for the purposes the	wledged that he/she executed the same as his/her
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of fourth inventor:	Yidong Wang
Residence:	33 Howarth Drive
	Upton, MA 01568
Citizenship:	P.R. China
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
	171-187-1979-1974-1974-1974-1974-1974-1974-197
On this day of me the above-named Yidong Wang k identification [] employee identification	, 2009, then personally appeared before mown to me through satisfactory evidence of tion card; [] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and acknown free act and deed for the purposes the	wledged that he/she executed the same as his/her
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of fifth inventor:	Prakash Chanderia
Residence:	70 Commons Drive, Apt. 55
	Shrewsbury, MA 01545
Citizenship:	India
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
COUNTY OF	
On this day of	, 2009, then personally appeared before deria known to me through satisfactory evidence of
me the above-named Prakash Chand	deria known to me through satisfactory evidence of
identification [] employee identifica	tion card; [] driver's license; [] (other) to be the person whose name is subscribed to
	wledged that he/she executed the same as his/her
free act and deed for the purposes th	erein contained.
	Notary Public
	Print Name:
	My Commission expires / /

-7-

Date:	
	Inventor's Signature
Print full name of sixth inventor:	Feng Zhou
Residence:	1640 Worcester Road, 518D
	Framingham, MA 01702
Citizenship:	China
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
COUNTY OF	
•	
On this day of	, 2009, then personally appeared before own to me through satisfactory evidence of
me the above-named Feng Zhou kno	own to me through satisfactory evidence of tion card; [] driver's license; [] (other)
	to be the person whose name is subscribed to
the foregoing Assignment and acknowledge act and deed for the purposes the	wedged that he/she executed the same as his/her
hee act and deed for the purposes th	erein contained.
	Notary Public
	Print Name:
	My Commission expires//

REEL: 023906 FRAME: 0790





PATENT/Joint Assignment Attorney Docket No.: 1003-099

19 th Becember 2009	EMC Docket No.: EMC-09-130
Date: 19/12/2009	- Ashwin
	Inventor's Signature
Print full name of seventh inventor:	Ashwin Ramkrishna Tidke
Residence:	307, Sunita Apartments, Plot 101, Sector-14
	Koparkhairane, Navi Mumbai 400709
Citizenship:	India
Mailing Address:	Same as above 10-B, Anandban Societ 43/3B, Somnathnagar,
TWO WITNESSES:	Pune-411014, India
Day From	The state of the s
1. Signature and alerna	2. Signature
Full Name Bajirao Garje	Full Name Ramkzishna Tidke
Address Garje Market	Address 10-B, Anandban Soc.
Chandannagar	4313B, Somnathnago
Pone -14	Pune -14
evidence of identification [] employee identification []	dentification card; [driver's license; [] to be the person whose name is and acknowledged that he/she executed the
INDE *	BEFORE ME
RAMRAO AREA O. 1825	Notary Public
O. 1825	Print Name: A. R. PALANDE NOTARY, GOVT. OF INDIA
e to produce a second contract of the contract	NOTED AND REGISTERED AT
PALANDE +	19 DEC 2009 SHH) 09

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PATENT

REEL: 023906 FRAME: 0791

RECORDED: 01/26/2010

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