PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Helen Raizen	01/31/2011
Atul Kabra	02/02/2011

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:	12977971

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:	1003-110
NAME OF SUBMITTER:	M. Ari Behar, Esq.

Total Attachments: 4

source=1003-110 - Exectued Assignment#page1.tif source=1003-110 - Exectued Assignment#page2.tif source=1003-110 - Exectued Assignment#page3.tif

501440841 PATENT REEL: 025820 FRAME: 0220

129779

CH \$40,00

source=1003-110 - Exectued Assignment#page4.tif

PATENT REEL: 025820 FRAME: 0221

ASSIGNMENT

WHEREAS, we, Helen Raizen and Atul Kabra 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 PRESERVING LBA INFORMATION BETWEEN LAYERS OF A STORAGE I/O STACK FOR LBA-DEPENDENT ENCRYPTION the specification of which:

[]	is being executed on or about even date herewith and is about to be filed in the United States Patent Office;
[X]	was filed on December 23, 2010 as U.S. Application No. 12/977,971;
[]	was patented under U.S. Patent Noonon

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;

AND we hereby authorize our attorneys Bainwood Huang & Associates LLC to insert here in parentheses (_________) 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: Jan. 31, 20/1	Helm Ry	
	Inventor's Signature	
Print full name of first inventor:	Helen Raizen	
Residence:	51 Bynner Street	
	Jamaica Plain, MA 02130	
Citizenship:	United States of America	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF		
On this		
the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.		
MICHAEL J. SANIUK NOTARY PUBLIC Commonwealth of Massachusetts My Commission Expires 10/26/2012	Notary Public Print Name:	

Date: 2rd FEB 2011	MD 7:	
	Inventor's Signature	
Print full name of second inventor:	Atul Kabra	
Residence:	H-20, Green Park	
	New Delhi, 110016 INDIA	
Citizenship:	India	
Mailing Address:	Same as above	
Venue: CAMBRIDGE, MA		
On this		
	Notary Public)	
	Print Name: Adrian Springer	
	My Commission expires 3 / 26 / 15	
	ADRIAN R. SPRINGER Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires March 26, 2015	

-4-

PATENT REEL: 025820 FRAME: 0225

RECORDED: 02/16/2011