PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Robert P. Foley	03/11/2013
Peter Puhov	03/11/2013
Marc C. Cassano	03/11/2013
Daniel E. Cummins	03/11/2013
David W. Harvey	03/11/2013

RECEIVING PARTY DATA

Name:	EMC Corporation
Street Address:	176 South Street
Internal Address:	Office of the General Counsel
City:	Hopkinton
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13804506

CORRESPONDENCE DATA

Fax Number: 5082937189

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

508-435-1000 Phone: Email: Docketing@emc.com

Correspondent Name: EMC CORPORATION OFFICE OF THE GENERAL CO

Address Line 1: 176 SOUTH STREET

Address Line 4: HOPKINTON, MASSACHUSETTS 01748

ATTORNEY DOCKET NUMBER: EMC-12-973

NAME OF SUBMITTER: Deepika Bhayana

REEL: 029997 FRAME: 0805

PATENT

502268548

Total Attachments: 7 source=EMC-12-973_Assignment_filed_3-14-13#page1.tif source=EMC-12-973_Assignment_filed_3-14-13#page2.tif source=EMC-12-973_Assignment_filed_3-14-13#page3.tif source=EMC-12-973_Assignment_filed_3-14-13#page4.tif source=EMC-12-973_Assignment_filed_3-14-13#page5.tif source=EMC-12-973_Assignment_filed_3-14-13#page6.tif source=EMC-12-973_Assignment_filed_3-14-13#page7.tif

PATENT REEL: 029997 FRAME: 0806

ASSIGNMENT

WHEREAS, we, Robert P. Foley, Peter Puhov, Marc C. Cassano, Daniel E. Cummins and David W. Harvey 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 MANAGING SOFTWARE ERRORS IN STORAGE SYSTEMS (Application), the specification of which:

[X]	is being executed on even da States Patent Office;	te herewith and is about to be filed in the Unite	:d
[]	was filed on	as U.S. Application No.	;
[]	was patented under U.S. Pate	ent Noon	
WHE	REAS, EMC Comoration (he	reinafter "ASSIGNEE"), a cornoration organize	ed ar

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

PATENT REEL: 029997 FRAME: 0807

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: 3/1/2013	RAPO_	
	Inventor's Signature	
Print full name of first inventor:	Robert P. Foley	
Residence:	705C Ridgefield Circle, Clinton, MA 01510	
Citizenship:	USA	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF		
	Notary Public	
	Print Name: Linette S. Kelley	
	My Commission expires <u>07/ 13/ 20/8</u>	
	LINETTE S. KELLEY Notary Public COMMONWEATH OF MASSACHUSETTS My Commission Expires July 13, 2018	

Date:	03/11/2013 Inventor's Signature
	Inventor's Signature
Print full name of second inventor:	Peter Puhov
Residence:	521 Grafton Street, Shrewsbury, MA 01545
Citizenship:	USA
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	lassachusetts Iddlesex
above-named <u>Peter Puhov</u> known to me thro employee identification card; [] driver's li to	, 2013, then personally appeared before me the nugh satisfactory evidence of identification [X] cense; [] (other) be the person whose name is subscribed to the at he/she executed the same as his/her free act and
	Lingtle S Kelley
	Notary Public
	Print Name: Linette S. Kelley
	My Commission expires 07/12/20/8
	LINETTE S. KELLEY Motary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018

Date: 3/1/13	Man Zallamo— Inventor's Signature
	· ·
Print full name of third inventor:	Marc C. Cassano
Residence:	8 Clark Street, Medway, MA 02053
Citizenship:	USÁ
Mailing Address:	Same as above
On this // day of March above-named March C. Cassano known to me employee identification card; [_] driver's lied to be the	he person whose name is subscribed to the
foregoing Assignment and acknowledged that deed for the purposes therein contained.	he/she executed the same as his/her free act and
	Skintle Skelley
	Notapy Bublie
	Print Name: Linette S. Kelley
	My Commission expires 07/18/2018
	LINETTE S. KELLEY POTATY PUBLIC COMMONWEALTH OF MASEACHUSETTS My Commission Expires July 13, 22"8

Date: 3/11/2013	Aur as
	Inventor's Signature
Print full name of fourth inventor:	Daniel E. Cummins
Residence:	12 Cathedral Lane, Hudson, NH 03051
Citizenship:	USA
Mailing Address:	Same as above
	rssachusetts Adlesex
[X] employee identification card; [] driver	te through satisfactory evidence of identification
	Senette S. Kelley
	Notary Public C
	Print Name: LineTto S Kolley
	My Commission expires 07 / 43 / 20/8
	LINETTE S. KELLEY Flotery Public COMMONWEAUTH OF MASSACHUSETTS My Commonition Expires July 13 2718

Date: 3/1/2013 °	David le Harrey
	Inventor's Signature
Print full name of fifth inventor:	David W. Harvey
Residence:	36 Pine Crest Road, Newton, MA 02459
Citizenship:	USA
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	<u>Lassachus että</u> MSANIssar
above-named <u>David W. Harvey</u> known to	2013, then personally appeared before me the me through satisfactory evidence of identification [X]
employee identification card; [] driver's to I	s treense; [] (other) be the person whose name is subscribed to the
foregoing Assignment and acknowledged deed for the purposes therein contained.	that he/she executed the same as his/her free act and
	Lenite S. Kelley
	Notary Public
	Print Name: Lincte S Kelley
	My Commission expires 07/13/2018
	LINETTE S. KELLEV Notary Public Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires
	tide 15 77 2