PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Assaf Natanzon	04/30/2012
Saar Cohen	04/30/2012
Jehuda Shemer	04/30/2012
Alex Solan	04/30/2012

RECEIVING PARTY DATA

Name:	EMC International Company
Street Address:	2 Church Street
City:	Hamilton
State/Country:	BERMUDA

PROPERTY NUMBERS Total: 4

Property Type	Number
Application Number:	13077246
Application Number:	13077256
Application Number:	13077262
Application Number:	13077266

CORRESPONDENCE DATA

Fax Number:

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

Email: Docketing@emc.com
Correspondent Name: EMC Corporation
Address Line 1: 176 South Street
Address Line 2: Joseph D'Angelo

Address Line 4: HOPKINTON, MASSACHUSETTS 01748

NAME OF SUBMITTER:	Joseph D'Angelo	
Signature:	/Joseph D'Angelo/	PATENT

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Date:	05/24/2013
Total Attachments: 6 source=EMC-10-445,446,447 & 11-002_Ass	signment-Natanzon, Cohen, Shemer & Solan#page1.tif
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ASSIGNMENT

WHEREAS, we, Assaf Natanzon, Saar Cohen, Jehuda Shemer, and Alex Solan, together with Steven R. Bromling, have invented inventions comprising and/or embodying certain improvements or discoveries or both as described in applications for Letters Patent of the United States entitled:

JOURNAL BASED REPLICATION WITH A VIRTUAL SERVICE LAYER, the specification of which was filed on March 31, 2011 as U.S. Application No. 13/077,246;

CONSISTENT REPLICATION IN A GEOGRAPHICALLY DISPERSE ACTIVE ENVIRONMENT, the specification of which was filed on March 31, 2011 as U.S. Application No. 13/077,256;

INVERSE STAR REPLICATION, the specification of which was filed on March 31, 2011 as U.S. Application No. 13/077,262; and

NETWORKED BASED REPLICATION OF DISTRIBUTED VOLUMES, the specification of which was filed on March 31, 2011 as U.S. Application No. 13/077,266; (Applications)

WHEREAS, EMC International Company (hereinafter "ASSIGNEE"), an unlimited private company organized under the laws of Ireland, with its principal place of activities at 2 Church Street, Hamilton, Bermuda, desires to acquire an interest therein in accordance with agreements duly entered into among EMC International Company, EMC Israel Development Center Ltd. and 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 inventions as described in said applications, together with the entire right, title and interest in and to said applications and such Letters Patent as may issue thereon; said inventions, applications 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:

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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 inventions or any applications or patents 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, EMC Corporation, to insert here in parenthesis (________) the application numbers and filing date of said Applications (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 scals as set forth below:

Date: 3 1/2012	M
\$	Inventor's Signature
Print full name of inventor	Assaf Natanzon
Residence	Levanon 95, Tel Aviv, Israel 69395
Citizenship	IL
Mailing Address	Same as above
I, What Meanud (nam	e of first witness), whose residential address is
Herteel Do Runat Gan I	
	nzon (name of person signing the assignment),
who is personally known to me, execute the al	oove assignment.
	(signature of first witness)
	(location of witness signature)
on this day, SON,	
Leehod	
I, Barach (nam	se of second witness), whose residential address is
Mobaliver 6, Herzdia Israel	e or second witness), whose residential address is
was personally present and did see Assaf Nata	inzon (name of person signing the assignment),
who is personally known to me, execute the a	bove assignment.
Lockal	(signature of second witness)
	(location of witness signature)
on this day,	20 (date of signature).

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Date: 30/4/2012	and the state of t
2000	Inventor's Signature
Print full name of inventor	Saar Cohen
Residence	P.O.B. 162, Moshav, Mishmeret, Israel 40695
Citizenship	IL
Mailing Address	Same as above
8	
I. Vitali Melawish (nam	e of first witness), whose residential address is
Hertel 80, Ramat Gan, I	e of first witness), whose residential address is
was personally present and did see Saar Coher	i (name of person signing the assignment), who is
personally known to me, execute the above as	signment.
1/9/19	
(<u>//////</u>	signature of first witness)(location of witness signature)
Signed at Harrolla	(location of witness signature)
on this day, SALA,	20 12 (date of signature).
I, <u>leebood</u> <u>partuch</u> (nam	ne of second witness), whose residential address is
·-	n (name of person signing the assignment), who is
personally known to me, execute the above as	signment.
1.1.1	('
Signed at Horizon A	(signature or second witness)
on this day, $30 6$	(location of witness signature)
on mis day, 30 ; ()	ZO : (Gate of signature).

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n	A.
Date: 30/4/1012	Myontor's Signature
Print full name of inventor	Jehuda Shemer
Residence	Brenner 7 Street, Kfar Saba, Israel 44349
Citizenship	IL.
Mailing Address	Same as above
1. Vitali Melamud Hertzel 80. Panat	(name of first witness), whose residential address is
•	a Shemer (name of person signing the assignment), who
is personally known/to me, execute the ab	oove assignment(signature of first witness)
Signad at No. 428 A	(location of witness signature)
on this day, 30 1/	
1. <u>Lechod Bornes</u> Malakar C. Hartzka	(name of second witness), whose residential address is
was personally present and did see Jehud	a Shemer (name of person signing the assignment), who
is personally known to me, execute the ab	
Lechel	(signature of second witness)
	(location of witness signature)
on this day. 30 h	. 20 👔 (date of signature).

Date: April 30th 2012	Jo.K
•	Inventor's Signature
Print full name of inventor	Alex Solan
Residence	Yair Shtem 7, Apt. 13, Hertzliya, Israel 46412
Citizenship	IL .
Mailing Address	Same as above
V. 1. M	
I, V px / Vela VIII d (nam	ne of first witness), whose residential address is
HEVITED \$0, ROWAT Gan -	kyar)
was personally present and did see Alex Solar	n (name of person signing the assignment), who is
personally known to me, execute the above as	signment.
V M	
	(signature of first witness)
Signed at 18/2/1/2 on this day, 30/4,	(location of witness signature)
on this day, <u>SVIV</u>	20 (date of signature).
0 1 1 5 0 1.	
$I_{i} = \frac{1}{\sqrt{2} + 2 \cdot \log n} $ (nan	ne of second witness), whose residential address is
1900 and Checketta for the	
-	n (name of person signing the assignment), who is
personally known to me, execute the above as	signment.
Signed at Restation	(signature of second witness) (location of witness signature)
Signed at Mer 12 i.a.	(location of witness signature)
on this day,	20 (date of signature).

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