502707360 03/05/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2753965

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
STEPHEN R. IVES	10/16/2009
JOHN F. MADDEN JR.	10/16/2009
MICHAEL DUDNIK	10/15/2009
HAGIT BRIT-ARTZI	10/15/2009
ROII RAZ	10/30/2009
HUI WANG	10/16/2009
GABI HERSHKOVITZ	11/16/2009
QUN FAN	12/14/2009
OFER MICHAEL	12/09/2009

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:	14197618

CORRESPONDENCE DATA

Fax Number:

Phone: 508-898-8601

Email: docketing@westboro-ip.com

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

Correspondent Name: MUIRHEAD AND SATURNELLI, LLC
Address Line 1: 200 FRIBERG PARKWAY, SUITE 1001
Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

502707360 REEL: 032355 FRAME: 0058

PATENT

ATTORNEY DOCKET NUMBER:	EMS-324USCON1
NAME OF SUBMITTER:	ANNE E. SATURNELLI
Signature:	/Anne E. Saturnelli/
Date:	03/05/2014
Total Attachments: 31 source=EMS-324USCON1, Assignment#pa	ge2.tif ge3.tif ge4.tif ge5.tif ge6.tif ge7.tif ge8.tif ge9.tif ge9.tif ge10.tif ge11.tif ge12.tif ge13.tif ge14.tif ge15.tif ge16.tif ge17.tif ge18.tif ge21.tif ge22.tif ge22.tif ge22.tif

source=EMS-324USCON1, Assignment#page28.tif source=EMS-324USCON1, Assignment#page29.tif source=EMS-324USCON1, Assignment#page30.tif source=EMS-324USCON1, Assignment#page31.tif

ASSIGNMENT

WHEREAS, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roii Raz, Hui Wang and Gabi Hershkovitz, 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 TECHNIQUES FOR PERFORMING DATA MIGRATION, 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 September 29, 2009 as U.S. Application No. 12/586,925;
[]	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;

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: 10/16/2009	Rod Pl
	Inventor's Signature
Print full name of first inventor:	Stephen R. Ives
Residence:	26 Shrewsbury Street
	West Boylston, MA 01583
Citizenship:	U.S.A.
Mailing Address:	Same
above-named Stephen R. Ives known to me employee identification card; [] driver's lice to be	(2009, then personally appeared before me the through satisfactory evidence of identification []

Date:	
	Inventor's Signature
Print full name of second inventor:	John F. Madden, Jr.
Residence:	28 Steppingstone Drive
	Holden, MA 01520
Citizenship:	USA
Mailing Address:	Same
COUNTY OF On this day of	, 2009, then personally appeared before me the
above-named John F. Madden, Jr. know [] employee identification card; [] d	wn to me through satisfactory evidence of identification
foregoing Assignment and acknowledged deed for the purposes therein contained.	d that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date:	
	Inventor's Signature
Print full name of third inventor:	Michael Dudnik
Residence:	390 Cherry Street
	Newton, MA 02465
Citizenship:	Israel
Mailing Address:	Same
On this day of, and mamed Michael Dudnik known to me to employee identification card; [] drive	2009, then personally appeared before me the above-through satisfactory evidence of identification [] er's license; [] (other)
·	to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date:	
	Inventor's Signature
Print full name of third inventor:	Hagit Brit-Artzi
Residence:	29 Berkeley Road
	Framingham, MA 01701
Citizenship:	Israel
Mailing Address:	Same
-	
COUNTY OF	2009, then personally appeared before me the above-
named Hagit Brit-Artzi known to me temployee identification card; [] drive	through satisfactory evidence of identification [] er's license; [] (other) to be the person whose name is subscribed to the
foregoing Assignment and acknowledg deed for the purposes therein contained	ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date:	
	Inventor's Signature
Print full name of third inventor:	Roii Raz
Residence:	66 Cole Avenue
	Providence, RI 02906
Citizenship:	USA
Mailing Address:	Same
STATE OF	
COUNTY OF	
named Roii Raz known to me through a identification card; [] driver's license be the person whose name is subscribed	2009, then personally appeared before me the above-satisfactory evidence of identification [] employee c; [] (other)to do not not to the foregoing Assignment and acknowledged that the act and deed for the purposes therein contained.
	Notary Public
	Print Name:
	My Commission expires:

Date:	
	Inventor's Signature
Print full name of third inventor:	Hui Wang
Residence:	60 South Street
	Upton, MA 01568
Citizenship:	USA
Mailing Address:	Same
STATE OF COUNTY OF	
named Hui Wang known to me through identification card; [] driver's license be the person whose name is subscribed	2009, then personally appeared before me the above- h satisfactory evidence of identification [] employee c; [] (other) to to the foregoing Assignment and acknowledged that e act and deed for the purposes therein contained.
	Notary Public
	Print Name:
	My Commission expires:

Date:	
	Inventor's Signature
Print full name of third inventor:	Gabi Hershkovitz
Residence:	21 Nardone Road
	Newton, MA 02459
Citizenship:	USA
Mailing Address:	Same
On this day of, 2 named Gabi Hershkovitz known to me employee identification card; [] drive	2009, then personally appeared before me the above- e through satisfactory evidence of identification []
	to be the person whose name is subscribed to the
foregoing Assignment and acknowledgedeed for the purposes therein contained	ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

ASSIGNMENT

WHEREAS, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roii Raz, Hui Wang and Gabi Hershkovitz, 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 TECHNIQUES FOR PERFORMING DATA MIGRATION, 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 September 29, 2009 as U.S. Application No. 12/586,925;	
[]	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;

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:	•
	Inventor's Signature
Print full name of first inventor:	Stephen R. Ives
Residence:	26 Shrewsbury Street
	West Boylston, MA 01583
Citizenship:	U.S.A.
Mailing Address:	Same
COUNTY OF On this day of	, 2009, then personally appeared before me the
above-named Stephen R. Ives known temployee identification card; [] drive	o me through satisfactory evidence of identification []
foregoing Assignment and acknowledgedeed for the purposes therein contained	ed that he/she executed the same as his/her free act and
	N. D. 11
	Notary Public
	Print Name:
	My Commission expires:

Date: 10[16[69.	Jale F- May 52
	Inventor's Signature
Print full name of second inventor:	John F. Madden, Jr.
Residence:	28 Steppingstone Drive
일을 잃고 있다는 사람이라는 사람이 되는 것이 되는 것을 받았다. 기대를 가는 하는 이 시대를 가고 있는 것이 되었습니다.	Holden, MA 01520
Citizenship:	USA
Mailing Address:	Same
above-named John F. Madden, Jr. known [] employee identification card; driv	x
foregoing Assignment and acknowledged to deed for the purposes therein contained.	hat he/she executed the same as his/her free act and
	Sandra a Zulaga
	Notary Public SANDRA K. KULAGA
	Print Name: (a) Commonwealth of memoryealth
	My Commission exp

REEL: 032355 FRAME: 0070

Date: 10/15/2009

Inventor's Signature

Print full name of third inventor:

Michael Dudnik

Residence:

390 Cherry Street

Newton, MA 02465

Citizenship:

Israel

Mailing Address:

Same

STATE OF <u>AIASSAC HUSE</u>TS COUNTY OF <u>AIADALE</u>SEX

On this 15 day of OctoBER, 2009, then personally appeared before me the above-named Michael Dudnik known to me through satisfactory evidence of identification [1] employee identification card; [1] driver's license; [1] (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:

My Commission e

SANDRA A. KULAGA

Notary Publis

COMMONWEATH OF MESACHURETTE

My Commission Expens

Date: 10/15/04		
	Inventor's Sign	ature
Print full name of third inventor:	Hagit Brit-Artzi	
Residence:	29 Berkeley Road 4 Sa	lliven Terre
있는 문자를 받았는데 하는데 그런 글로 하는데 되었다. 역사 등 것 같은데 이번 하는 등 기를 있는데 말을 모든 등록	Framingham, MA 01701	10/15/01
Citizenship:	Israel CLJA	11715707 HB
Mailing Address:	Same	,,,,, .
On this <u>/5</u> day of <u>\C70BER</u> , named Hagit Brit-Artzi known to me	through satisfactory evidence of identi	
employee identification card; [] drive	er's ncense; [] (otner) to be the person whose name is subscr	ibed to the
foregoing Assignment and acknowledg leed for the purposes therein contained	ed that he/she executed the same as hi	
	Sandra as	Zulaga
	Notary Public	SANDRA A. KURLAGA
	Print Name:	CHANGE CONTRACTOR
and the state of a control of the co		

-5-

PATENT

REEL: 032355 FRAME: 0072

Date:	
	Inventor's Signature
Print full name of third inventor:	Roii Raz
Residence:	66 Cole Avenue
	Providence, RI 02906
Citizenship:	USA
Mailing Address:	Same
named Roii Raz known to me through sidentification card; [] driver's license	2009, then personally appeared before me the above-satisfactory evidence of identification [] employee ; [] (other) to I to the foregoing Assignment and acknowledged that
	act and deed for the purposes therein contained.
All Fresh Comments of the Comm	Notary Public
SECTION ASSESSED ASSESSEDA	Print Name:
His Land	My Commission expires:

Date: 10-16-2009	Ja	
	lnve	entor's Signature
Print full name of third inventor:	Hui Wang	
Residence:	60 South Street	
	Upton, MA 01568	
Citizenship:	USA	
Mailing Address:	Same	
On this <u>/6</u> day of <u>(ICTOBER</u> , 20 named Hui Wang known to me through	satisfactory evidence of i	dentification [] employee
identification card; [太] driver's license; be the person whose name is subscribed	[] (other)	to
ne/she executed the same as his/her free	act and deed for the purpo	oses therein contained.
	Sandras	a. Lulaga
	Notary Public	SANDRA A KILAGA Notery Public Commonwealth of the Section Laboratory
	Print Name:	My Commission Expose
	My Commission ex	

REEL: 032355 FRAME: 0074

Date:	
	Inventor's Signature
Print full name of third inventor:	Gabi Hershkovitz
Residence:	21 Nardone Road
	Newton, MA 02459
Citizenship:	USA
Mailing Address:	Same
	2009, then personally appeared before me the above- e through satisfactory evidence of identification [] er's license; [] (other)
foregoing Assignment and acknowledge deed for the purposes therein contained.	to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
April 19 Committee of the Committee of t	
PLACE AND THE CONTRACT OF STREET AND THE STREET AND	Notary Public
The same of the sa	Print Name:
	My Commission expires:

ASSIGNMENT

WHEREAS, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roii Raz, Hui Wang and Gabi Hershkovitz, 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 TECHNIQUES FOR PERFORMING DATA MIGRATION, the specification of which:

[]	is being executed on even date herewith an States Patent Office;	d is about to be filed in the Unite	ed
[X]	was filed on September 29, 2009 as U.S. A	application No. 12/586,925;	
[]	was patented under U.S. Patent No.	on	

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

Date: 19/30/09		
	Inventor's Signature	
Print full name of third inventor:	Roii Raz	
Residence:	66 Cole Avenue	
	Providence, RI 02906	
Citizenship:	USA	
Mailing Address:	Same	
COUNTY OF MUCHULLY On this 30 day of 000 hw, 2009, then personally appeared before me the above- named Roii Raz known to me through satisfactory evidence of identification [_] employee dentification card; [_] driver's license; [_Y(other)Known to me 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: Nancy E. Buck		
	My Commission expires: Aug 27, 2010	

ASSIGNMENT

WHEREAS, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roii Raz, Hui Wang and Gabi Hershkovitz, 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 TECHNIQUES FOR PERFORMING DATA MIGRATION, 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 September 29, 2009 as U.S. Application No. 12/586,925;
[]	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

Date:	and Joseph .
	Inventor's Signature
Print full name of third inventor:	Gabi Hershkovitz
Residence:	21 Nardone Road Newton, MA 02459
Citizenship:	USA
Mailing Address:	Same
named Gabi Hershkovitz known to me	009, then personally appeared before me the above-through satisfactory evidence of identification []
employee identification card; [_] driver <u>KNDUN +0 M</u> to	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 Many E. Buck Notary Public
	Print Name: Nancy & Bucker
	My Commission expires: 8-37-2010

ASSIGNMENT

WHEREAS, we, Stephen R. Ives, John F. Madden, Jr., Michael Dudnik, Hagit Brit-Artzi, Roii Raz, Hui Wang, Gabi Hershkovitz, Qun Fan and Ofer Michael 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 TECHNIQUES FOR PERFORMING DATA MIGRATION, 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 September 29, 2009 as U.S. Application No. 12/586,925;
[]	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;

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:	
	Inventor's Signature
Print full name of first inventor:	Stephen R. Ives
Residence:	26 Shrewsbury Street
	West Boylston, MA 01583
Citizenship:	U.S.A.
Mailing Address:	Same
employee identification card; [_] drive	to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date:	_			
	Inventor's Signature			
Print full name of second inventor:	John F. Madden, Jr.			
Residence:	28 Steppingstone Drive			
	Holden, MA 01520			
Citizenship:	USA			
Mailing Address:	Same			
above-named John F. Madden, Jr. know [] employee identification card; [] d	, 2009, then personally appeared before me the			
foregoing Assignment and acknowledged deed for the purposes therein contained.	d that he/she executed the same as his/her free act and			
	Notary Public			
	Print Name:			
	My Commission expires:			

Date:	
	Inventor's Signature
Print full name of third inventor:	Michael Dudnik
Residence:	390 Cherry Street
	Newton, MA 02465
Citizenship:	Israel
Mailing Address:	Same
on this day of, 2 named Michael Dudnik known to me t employee identification card; [] drive	2009, then personally appeared before me the above-through satisfactory evidence of identification [] er's license; [] (other)
	to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date:					
	Inventor's Signature				
Print full name of fourth inventor:	Hagit Brit-Artzi				
Residence:	29 Berkeley Road				
	Framingham, MA 01701				
Citizenship:	Israel				
Mailing Address:	Same				
named Hagit Brit-Artzi known to me the employee identification card; [] driver	009, then personally appeared before me the above- arough satisfactory evidence of identification [] s's license; [] (other) to be the person whose name is subscribed to the				
oregoing Assignment and acknowledged leed for the purposes therein contained.	d that he/she executed the same as his/her free act and				
	Notary Public				
	Print Name:				
	My Commission expires:				

	Inventor's Signature
Print full name of fifth inventor:	Roii Raz
Residence:	66 Cole Avenue
	Providence, RI 02906
Citizenship:	USA
Mailing Address:	Same
named Roii Raz known to me through: identification card; [] driver's license be the person whose name is subscribed	2009, then personally appeared before me the above- satisfactory evidence of identification [] employee ; [] (other) to to the foregoing Assignment and acknowledged that
morsho oxeodica (ne same as MS/nel Nes	act and deed for the purposes therein contained.
	Notary Public
	Print Name:
	My Commission expires:

Date:			
	Inventor's Signature		
Print full name of sixth inventor:	Hui Wang		
Residence:	60 South Street		
	Upton, MA 01568		
Citizenship:	USA		
Mailing Address:	Same		
named Hui Wang known to me through identification card; [] driver's license be the person whose name is subscribed	2009, then personally appeared before me the above- h satisfactory evidence of identification [] employee e; [] (other) to t to the foregoing Assignment and acknowledged that e act and deed for the purposes therein contained.		
	Notary Public		
	Print Name:		
	My Commission expires:		

Date:	,
	Inventor's Signature
Print full name of seventh inventor:	Gabi Hershkovitz
Residence:	21 Nardone Road
	Newton, MA 02459
Citizenship:	USA
Mailing Address:	Same
On this day of, 20 named Gabi Hershkovitz known to me t employee identification card; [] driver	109, then personally appeared before me the above-through satisfactory evidence of identification []
to	be the person whose name is subscribed to the it that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires:

Date: 12/14/09	
	Inventor's Signature
Print full name of eighth inventor:	Qun Fan
Residence:	211 Howard Street
	Northborough, MA 01532
Citizenship:	China U.S.A A 12/14/39
Mailing Address:	Same
dentification card; [] driver's license; []	e foregoing Assignment and acknowledged that
	Klistina a. Whit Notary Public
KRISTINA A. WHITE Notary Public Commonwealth of Massachusetts My Commission Expires Aurust 25, 5011	Print Name: Kristna A, Wh. Le My Commission expires: august 25, 2011

Date: 12/9/09	- 0.MM
	Inventor's Signature
Print full name of ninth inventor	; Ofer Michael
Residence:	135 Technology Drive, Suite 100 Irvine, CA 92618
Citizenship:	USA
Mailing Address:	Same
THE OF MAKE	
TATE OF CAMPAG	
on this <u>A</u> day of <u>Occas</u> amed Ofer Michael known to i	2009, then personally appeared before me the above- me through satisfactory evidence of identification [] driver's license; [] (other)
On this day of Decembrance Ofer Michael known to a mployee identification card; [see the content of the purposes therein content in the purpose in the purpose the	2009, then personally appeared before me the aboveme through satisfactory evidence of identification [] driver's license; [] (other)to be the person whose name is subscribed to the wledged that he/she executed the same as his/her free act and
On this A day of Decay named Ofer Michael known to a simployee identification card; [Le oregoing Assignment and acknowled for the purposes therein confide according to the purpose the pu	
mployee identification card; [(2009, then personally appeared before me the aboveme through satisfactory evidence of identification []] driver's license; [] (other) to be the person whose name is subscribed to the wledged that he/she executed the same as his/her free act and tained.

Eng-32445 Enc-09-09:

ACKNOWLEDGMENT

State o	f Ca	alifo	rni	а		riet.	
County	of	1	62	å,	124	0	
		-	*	* 1		-	

On 92009 before me, Susan E. Knudson, Notary Public

personally appeared <u>Offer Michael</u>

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/ber/their authorized capacity(jes), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Ewan & Krudy

WITNESS my hand and official seal.



PATENT

REEL: 032355 FRAME: 0090

RECORDED: 03/05/2014