502919936 08/04/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2966534

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEAN-PIERRE BONO	07/02/2014
MICHAL MARKO	07/08/2014
WALTER C. FORRESTER	07/21/2014
ALEXANDER MATHEWS	07/09/2014
JAMES P. FERRIGNO	07/24/2014
YUNFEI CHEN	07/03/2014

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:	14319634

CORRESPONDENCE DATA

Fax Number: (508)366-4688

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 5086162900

Email: docket@bainwoodhuang.com BRUCE D. RUBENSTEIN, ESQ. Correspondent Name:

Address Line 1: BAINWOOD, HUANG & ASSOCIATES, LLC

Address Line 2: 2 CONNECTOR ROAD

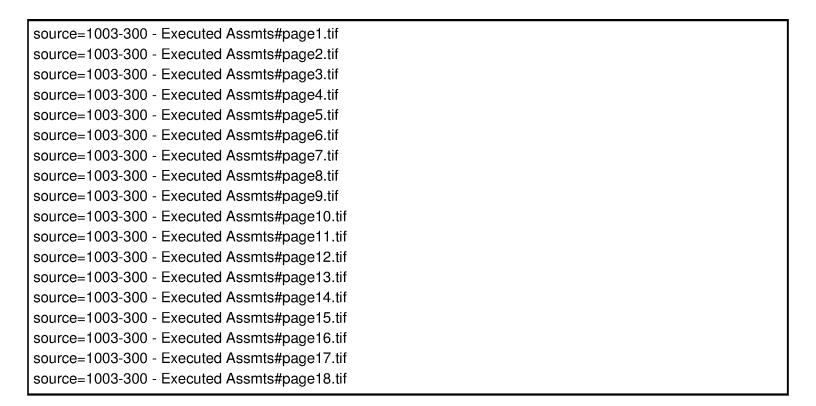
Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	1003-300	
NAME OF SUBMITTER:	BRUCE D. RUBENSTEIN, ESQ.	
SIGNATURE:	/Bruce D. Rubenstein #39,349/	
DATE SIGNED:	08/04/2014	

Total Attachments: 18

REEL: 033455 FRAME: 0254 502919936

PATENT



PATENT REEL: 033455 FRAME: 0255

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, <u>Jean-Pierre Bono</u>, as the original inventor or an original joint inventor 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:

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made: I 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. I 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;

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

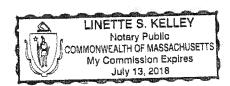
applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

A	
Inventor's Signature	
Jean-Pierre Bono	
33 Wachusett View Drive	
Westborough, MA 01581	
US	
Same as above	
Same as above STATE/COMMONWEALTH OF Massachusetts COUNTY OF Middlesex On this day of July, 20 //, then personally appeared before me the above-named Jean-Pierre Bono known to me through satisfactory evidence of identification [X] 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. Print Name: When the State of the purpose identification card; which is a 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. Print Name: My Commission expires 071 131 20 /8	



EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, Michal Marko, as the original inventor or an original joint inventor 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:

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made: I 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. I 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;

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

Date: 7/8/14	la las
	Inventor's Signature
Legal name of inventor:	Michal Marko
Residence:	30 Montrose Ave
	Fanwood, NJ 07023
Citizenship:	US
Mailing Address:	Same as above
STATE/COMMONWEALTH OF _ COUNTY OF _	NEW Jersey
COUNTY OF _	VNION
me the above-named Michal Mark	, 20 / //, then personally appeared before own to me through satisfactory evidence of cation card; [X] driver's license; [] (other) to be the person whose name is subscribed to
	nowledged that he/she executed the same as his/her
free act and deed for the purposes	therein contained.
	Notary Public
	Print Name: PATRICIA R. Celardo
	My Commission expires <u>○∂</u> / <u>○ </u> //

Patricia R Celardo **Notary Public** New Jersey My Commission Expires 2-07-16

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, <u>Walter C. Forrester</u>, as the original inventor or an original joint inventor 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:

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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:

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

Date: 7/21/14		
	Inventor's Signature	
Legal name of inventor:	Walter C. Forrester	
Residence:	21 Magnum Court	
	Berkeley Heights, NJ 07922	
Citizenship:	US	
Mailing Address:	Same as above	
STATE/COMMONWEALTH OF COUNTY OF	n por	
On this 2 day of, 20, then personally appeared before me the above-named Walter C. Forrester 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.		
	Main Adille	
	Notary Public	
	Print Name: WASA	
	My Commission expires 1 1 201 2017	
	MARCIA V. WAITHE NOTARY PUBLIC OF NEW JERSEY MY COMMISSION EXPIRES JAN. 20, 2017	

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, <u>Alexander Mathews</u>, as the original inventor or an original joint inventor 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:

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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;

EMC Docket No.: EMC-13-1213

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

PATENT ASSIGNMENT Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

Date: 7/9/2014	- Al-C/H
	Inventor's Signature
Legal name of inventor:	Alexander Mathews
Residence:	74 Sand Hill Road
	Jamesburg, NJ 08831
Citizenship:	US
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF	New Jersey Middlesex
On this 9 1 day of July me the above-named Alexander I of identification [_] employee iden	, 20 19, then personally appeared before Mathews known to me through satisfactory evidence atification card; [x] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and ack free act and deed for the purposes	nowledged that he/she executed the same as his/her therein contained.
	Kith Mai By
	Notary Public
	Print Name:
	Kristine Maric Baylis
	My Commission expires <u>//</u> / <u>30</u> / <u>2016</u>

KRISTINE MARIE BAYLIS NOTARY PUBLIC OF NEW JERSEY My Commission Expires 11/30/2016

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, <u>James P. Ferrigno</u>, as the original inventor or an original joint inventor 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:

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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:

EMC Docket No.: EMC-13-1213

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Attorney Docket No.: 1003-300 EMC Docket No.: EMC-13-1213

Date: 7/24/2014	James Ferriga
	Inventors Signature
Legal name of inventor:	James P. Ferrigno
Residence:	51 Bridgewater Dr.
	Mariton, NJ 08053
Citizenship:	US
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	en Jersej Vington
COUNTY OF 150	ling ton
	.
On this 24th day of July	, 20 <u>14</u> , then personally appeared before
me the above-named James P. Ferrign	o known to me through satisfactory evidence of
identification [] employee identification	card; [
	dged that he/she executed the same as his/her
free act and deed for the purposes there	
MICHAEL A. FERENZ	
NOTARY PUBLIC OF NEW JERSEY	Notary Public
My Commission Expires 5/23/2016	Print Name:
	Michael Ferenz
	My Commission expires <u>05</u> 1 <u>23</u> 1 <u>2016</u>

EMC Docket No.: EMC-13-1213

ASSIGNMENT

WHEREAS, I, <u>Yunfei Chen</u>, as the original inventor or an original joint inventor 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

AUXILIARY FILES IN A CONTAINER FILE SYSTEM

which is further identified by Attorney Docket Number 1003-300;

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, USA desires to acquire an interest therein in accordance with agreements duly entered into with me:

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, I 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 me had this assignment and sale not been made; I 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. I 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;

EMC Docket No.: EMC-13-1213

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, I 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 I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (14/319,634 filed on June 30, 2014) the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

EMC Docket No.: EMC-13-1213

Date: July 3, 2014	Yungei Chon
	Inventor's Signature
Print full name of first inventor:	Yunfei Chen
Residence:	No 252
	Songhu Rd, Shanghai
	People's Republic of China
Citizenship:	CN
Mailing Address:	Same as above
I Xin Ming ang Lian X, Rd # 16(, Shang was personally present and did of person signing the assignment) who is assignment.	(name) whose residential address is ha; People's Republic of China. I see Yun fe; Chen (name personally known to me, execute the above
Xin Many Yang Signed at No 252, Song hu Rd. Sh	_(signature of first witness) ang hai, People's Republic of China (location of witness signature)
on this day July 3rd	
I Fruk'e Fang No 285 Rd Zheng Tong , Sho was personally present and did of person signing the assignment) who is assignment.	(name) whose residential address is คริปแล้ว China Psee <u>Yun fea Chen</u> (name personally known to me, execute the above
Fruit For	(signature of second witness)
	hai, China (location of witness signature)
on this day July 3	of 20 <u>(</u> . (date of signature)