

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Philippe Armangau	04/02/2013
Chris Seibel	04/02/2013
Xiangping Chen	04/03/2013
Jean-Pierre Bono	04/02/2013
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:	13626422
CORRESPONDENCE DATA	
Fax Number:	5083664688
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
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:	1003-179
NAME OF SUBMITTER:	David E. Huang, Esq.
Signature:	/David E. Huang/

CH \$40.00 13626422

Date:

04/26/2013

Total Attachments: 12

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ASSIGNMENT

WHEREAS, I, Philippe Armangau, 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

SELECTIVE DEFRAGMENTATION BASED ON IO HOT SPOTS

which is further identified by Attorney Docket Number 1003-179;

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;

AND, I hereby further agree for myself and my 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

PATENT ASSIGNMENT
Attorney Docket No.: 1003-179
EMC Docket No.: EMC-12-606

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 my attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (13/626,422 filed on 09/25/2012) 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, I have hereunto set my hand and affixed my seal as set forth below:

PATENT ASSIGNMENT
Attorney Docket No.: 1003-179
EMC Docket No.: EMC-12-606

Date: 4/2/13

Philippe Armangau
Inventor's Signature

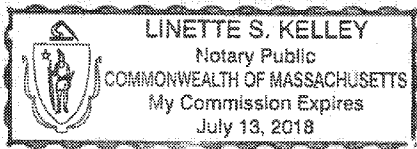
Legal name of inventor: Philippe Armangau
Residence: 51 Seminole Road
Acton, MA 01720
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 2nd day of April, 2013, then personally appeared before me the above-named Philippe Armangau 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.

Linette S. Kelley
Notary Public

Print Name: Linette S. Kelley
My Commission expires 07/13/2018



ASSIGNMENT

WHEREAS, I, Chris Seibel, 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

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which is further identified by Attorney Docket Number 1003-179;

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;

AND, I hereby further agree for myself and my 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

PATENT ASSIGNMENT
Attorney Docket No.: 1003-179
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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 my attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (13/626,422 filed on 09/25/2012) 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, I have hereunto set my hand and affixed my seal as set forth below:

Date: 4/2/2012

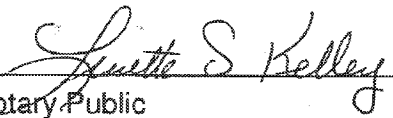


Inventor's Signature

Legal name of inventor: Chris Seibel
Residence: 7 Jean Road
Walpole, MA 02081
Citizenship: US
Mailing Address: Same as above

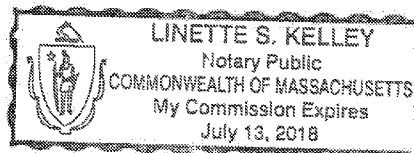
STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 2nd day of April, 2012, then personally appeared before me the above-named Chris Seibel 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.



Notary Public

Print Name: Linette S. Kelley
My Commission expires 07/13/2018



ASSIGNMENT

WHEREAS, I, Xiangping Chen, 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

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which is further identified by Attorney Docket Number 1003-179;

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;

AND, I hereby further agree for myself and my 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

PATENT ASSIGNMENT
Attorney Docket No.: 1003-179
EMC Docket No.: EMC-12-606

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 my attorneys at Bainwood Huang & Associates LLC to insert here in parentheses (131626,422 filed on 09/25/2012) 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, I have hereunto set my hand and affixed my seal as set forth below:

Date: 04/03/13

Xiangping Chen
Inventor's Signature

Legal name of inventor: Xiangping Chen
Residence: 22 Harrington Ridge Road
Sherborn, MA 01770
Citizenship: US
Mailing Address: Same as above

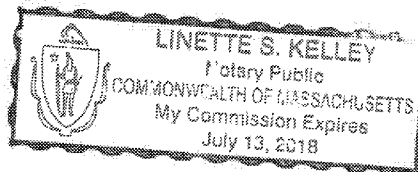
STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 3rd day of April, 2013, then personally appeared before me the above-named Xiangping Chen 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.

Linette S. Kelley
Notary Public

Print Name:

Linette S. Kelley
My Commission expires 07/13/2018



ASSIGNMENT

WHEREAS, I, Jean-Pierre Bono, 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

SELECTIVE DEFRAGMENTATION BASED ON IO HOT SPOTS

which is further identified by Attorney Docket Number 1003-179;

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;

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IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal as set forth below:

PATENT ASSIGNMENT
Attorney Docket No.: 1003-179
EMC Docket No.: EMC-12-606

Date: 4/02/13

[Signature]
Inventor's Signature

Legal name of inventor: Jean-Pierre Bono
Residence: 33 Wachusett View Drive
Westborough, MA 01581
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 2nd day of April, 2013, then personally appeared before me the above-named Jean-Pierre Bono 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.

[Signature]
Notary Public

Print Name: Linette S. Kelley
My Commission expires 07/13/2018

