

12.28

01-09-2008



Docket No.: EMS-188US1

To the Director of the U.S. Patent and Trademark Office

ed documents or the new address(es) below.

103473756

1. Name of conveying party(ies)/Execut.

Address of receiving party(ies):

(a) Brian CASTELLI (b) Andreas L. BAUER  
(c) Mark A. PARENTI (d) Stephen J. TODD  
(e) Douglas A. WOOD

Name: EMC Corporation

Execution Date(s): (a) 12/20/07 (c) 12/21/07  
(b) 12/21/07 (d) 12/20/07 (e) 12/27/07

Internal Address:

Street Address: 176 South Street  
Hopkinton, Massachusetts 01748

Additional name(s) of conveying party(ies) attached?  Yes  No

Country: United States of America

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

4. Application or patent number(s):

This document is being filed together with a new application

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 1

Name: Muirhead and Saturnelli, LLC

7. Total fee (37 CFR 1.21(h) & 3.41).....\$ 40.00

Internal Address:

- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

Street Address: 200 Friberg Parkway  
Suite 1001

City: Westborough

State: Massachusetts Zip: 01581

Fax Number: 508-898-8602

8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_

Expiration Date \_\_\_\_\_

b. Deposit Account Number 05-0889

Authorized User Name Anne E. Saturnelli

9. Signature:

Anne E. Saturnelli, Reg. No. 41,290

Name of Person Signing

Signature

December 28, 2007

Date

Total number of pages including cover sheet, attachments, and documents: 13

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:  
Mail Stop Assignment Recordation Services  
Director of the U.S. Patent and Trademark Office  
P.O. Box 1450, Alexandria, VA 22313-1450

## ASSIGNMENT

**WHEREAS**, we, Brian CASTELLI, Andreas L. BAUER, Mark A. PARENTI, Stephen J. TODD, and Douglas A. WOOD 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 APPLICATION AWARE STORAGE RESOURCE PROVISIONING, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on \_\_\_\_\_ as U.S. Application No. \_\_\_\_\_;
- 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

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: 12-20-07

Brian Castelli  
Inventor's Signature

Print full name of first inventor:

**Brian CASTELLI**

Residence:

1709 Balfour Downs Circle

Fuquay-Varina, NC 27526

Citizenship:

U.S.A.

Mailing Address:

Same

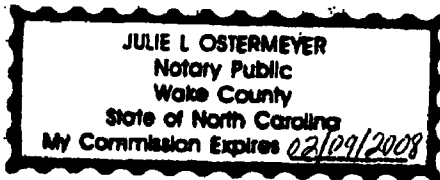
STATE OF NORTH CAROLINA  
COUNTY OF DURHAM

On this 20 day of DECEMBER, 2007, then personally appeared before me the above-named **Brian CASTELLI** 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.

Julie L. Ostermeyer  
Notary Public

Print Name: JULIE L. OSTERMEYER

My Commission expires: FEB. 09, 2008



Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of second inventor: **Andreas L. BAUER**  
Residence: 55 Boxmill Road  
Boxborough, MA 01719  
Citizenship: GERMANY  
Mailing Address: Same

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF \_\_\_\_\_

On this \_\_\_ day of \_\_\_\_\_, 200 \_\_, then personally appeared before me the above-named **Andreas L. BAUER** 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:

My Commission expires:

Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of third inventor:

**Mark A. PARENTI**

Residence:

27 Orchard Street  
Milford, NH 03055

Citizenship:

USA

Mailing Address:

Same

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named **Mark A. PARENTI** 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:

My Commission expires:

Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of fourth inventor:

**Stephen J. TODD**

Residence:

36 Thomas Farm Circle  
Shrewsbury, MA 01545

Citizenship:

U.S.A.

Mailing Address:

Same

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named **Stephen J. TODD** 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:

My Commission expires:

Date: \_\_\_\_\_

\_\_\_\_\_  
Inventor's Signature

Print full name of fifth inventor:

**Douglas A. WOOD**

Residence:

15 Honeysuckle Road  
Westford, MA 01886

Citizenship:

USA

Mailing Address:

Same

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named **Douglas A. WOOD** 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:

My Commission expires:

## ASSIGNMENT

**WHEREAS**, we, Brian CASTELLI, Andreas L. BAUER, Mark A. PARENTI, Stephen J. TODD, and Douglas A. WOOD 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 APPLICATION AWARE STORAGE RESOURCE PROVISIONING, the specification of which:

- [ X ] is being executed on even date herewith and is about to be filed in the United States Patent Office;
- [ ] was filed on \_\_\_\_\_ as U.S. Application No. \_\_\_\_\_;
- [ ] 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



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:

**Brian CASTELLI**

Residence:

1709 Balfour Downs Circle  
Fuquay-Varina, NC 27526

Citizenship:

U.S.A.

Mailing Address:

Same

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this \_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named **Brian CASTELLI** 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:

My Commission expires:

Date: 12/21/07

[Handwritten Signature]  
Inventor's Signature

Print full name of third inventor: **Mark A. PARENTI**  
Residence: 27 Orchard Street  
Milford, NH 03055  
Citizenship: USA  
Mailing Address: Same

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF Middlesex

On this 21 day of December, 2007, then personally appeared before me the above-named **Mark A. PARENTI** 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.

Kristina A. White  
Notary Public

Print Name: Kristina A. White

My Commission expires:



KRISTINA A. WHITE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
August 25, 2011

Date: 12/27/07

Douglas A. Wood  
Inventor's Signature


Print full name of fifth inventor: **Douglas A. WOOD**  
Residence: 15 Honeysuckle Road  
Westford, MA 01886  
Citizenship: USA  
Mailing Address: Same

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF Middlesex

On this 27 day of December, 2007, then personally appeared before me the above-named **Douglas A. WOOD** 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.

Kristina A. White  
Notary Public

Print Name: KRISTINA A. White  
My Commission expires:

 KRISTINA A. WHITE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
August 25 2011