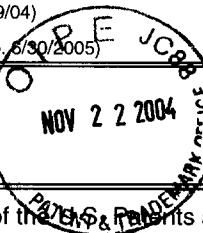


11-29-2004

EMC-03-150



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1 SHEET

Y

To the Director of the U.S. Patents and Trademarks Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):
Gerard McAndrews, Michael J. Cody, Brian Joseph Gardner

Execution Date: 10/13/04, 11/15/04

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

3. Nature of Conveyance:

- [X] Assignment [] Merger
[] Security Agreement [] Change of Name
[] Government Interest Assignment
[] Executive Order 9424, Confirmation License
[] Other _____

2. Name and address of receiving party(ies):

Name: EMC Corporation

Internal Address: Office of the General Counsel

Street Address: 176 South Street

City: Hopkinton

State: Massachusetts

Country: USA Zip: 01748

Additional name(s) and address(es) attached? [] Yes [X] No

4. Application or patent number(s):

[] This document is being filed together with a new application.

A. Patent Application No.(s) 10/883,451

B. Patent No.(s) _____

Additional numbers attached? [] Yes [X] No

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

Name: Robert Kevin Perkins

Internal Address: EMC Corporation

Office of the General Counsel

Street Address: 176 South Street

City: Hopkinton State: MA Zip: 01748

Phone Number: 508-293-6985

Fax Number: 508-293-7189

Email Address: perkins_rkevin@emc.com

6. Total number of applications and patents involved:

[1]

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

[] Authorized to be charge by credit card

[X] Authorized to be charged to deposit account

[] Enclosed

[] None required (government interest not affecting title)

8. Payment Informationa. Credit Card Last 4 Numbers _____
Expiration Date _____

b. Deposit account number 05-0889

Authorized User Name Robert Kevin Perkins

9. Signature:

Signature

November 18, 2004

Date

Robert Kevin Perkins

Total number of pages including cover

Name of Person Signing

sheet, attachments, and documents: []

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 USPTO, P.O. Box 1450, Alexandria VA 22313-1450

11/29/2004 ECDOPER 00000030 050889 10883451

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40.00 DA

PATENT
REEL: 016011 FRAME: 0809

ASSIGNMENT

WHEREAS, we, Gerard McAndrews, Michael J. Cody and Brian Joseph Gardner 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 *SYSTEM AND METHOD FOR MANAGING REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT*, 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 July 1, 2004 as U.S. Application No. 10/883,451;

☐ 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: 10/13/04

Gerard McAndrews
Inventor's Signature

Print full name of first inventor:

Gerard McAndrews

Residence:

282 Hilltop Road, Lancaster, Massachusetts
01523

Citizenship:

USA

Mailing Address:

Same as above

STATE/Commonwealth of
COUNTY OF

Massachusetts
Middlesex

On this 13th day of October, 2004, then personally appeared before me the above-named Gerard McAndrews 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.

Patricia E. Maloney
Notary Public

Print Name: PATRICIA E. MALONEY

My Commission expires 03/24/2011



PATRICIA ELIZABETH MALONEY
Notary Public
Commonwealth of Massachusetts
My Commission Expires
March 24, 2011

Date:

10/13/04

Michael J. Cody
Inventor's Signature

Print full name of second inventor:

Michael J. Cody

Residence:

99 Lowell Road, Wellesley, Massachusetts
02481

Citizenship:

USA

Mailing Address:

Same as above

STATE/Commonwealth of
COUNTY OF

Massachusetts
Middlesex

On this 13th day of October, 2004, then personally appeared before me the above-named Michael J. Cody 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.

Patricia E. Maloney
Notary Public

Print Name: PATRICIA E. MALONEY

My Commission expires 03/24/2011



PATRICIA ELIZABETH MALONEY
Notary Public
Commonwealth of Massachusetts
My Commission Expires
March 24, 2011

Date: 15 Nov 2004

Brian Joseph Gardner
Inventor's Signature

Print full name of third inventor:

Brian Joseph Gardner

Residence:

4464 Openmeadow Ct., San Jose, California
95129

Citizenship:

USA

Mailing Address:

Same as above

STATE/Commonwealth of
COUNTY OF

California
Santa Clara

Then personally appeared before me the above-named Brian Joseph Gardner and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 15 day of November, 2004.

Deanna L. Santos
Notary Public

Print Name: Deanna L. Santos

My Commission expires 8/21/08

