

6-16-05

Form PTO-1595 (Rev. 09/04)
OMB No. 0651-0027 (exp. 6/30/2005)

06-22-2005

DEPARTMENT OF COMMERCE
Patent and Trademark OfficeRECORDATION
PA

103025491

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

1. Name of conveying party(ies)/Execution Date(s):

Phillip Fultz, Ashok Tamilarasan, Michael Manning, Thomas Dibb

Execution Date(s) June 15, 2005Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of conveyance:**

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

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

Internal Address: _____

Street Address: 176 South StreetCity: HopkintonState: MA 01748Country: USA Zip: 01748Additional 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:**Name: Richard M. Sharkansky

Internal Address: _____

Street Address: P. O. Box 557City: MashpeeState: MAZip: 02649Phone Number: 508 477 4311Fax Number: 508 477 7234Email Address: sharkansky@comcast.net**6. Total number of applications and patents involved:**

1

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

- ☐ Authorized to be charged by credit card
☒ 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 05-0889Authorized User Name Richard M. Sharkansky**9. Signature:**

Signature

Date

Richard M. Sharkansky

Name of Person Signing

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

6

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, V.A. 22313-1450

06/21/2005 LMUELLER 00000085 050889 1115393E

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PATENT
REEL: 016696 FRAME: 0067

ASSIGNMENT

WHEREAS, we, Phillip Fultz, Ashok Tamilarasan, Michael Manning and Thomas Dibb 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 **METHOD FOR OPERATING DISK DRIVES IN A DATA STORAGE SYSTEM**, 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: 6/15/05

Phillip Fultz
Inventor's Signature

Print full name of first inventor: **Phillip Fultz**
Residence: Clinton, MA 01510
Citizenship: United States of America
Mailing Address: 613 Devenwood Way
Clinton, MA 01510

STATE/Commonwealth of Massachusetts
COUNTY OF Worcester

On this 15th day of June, 2005, then personally appeared before me the above-named Phillip Fultz known to me through satisfactory evidence of identification [☒] employee identification card; [☒] driver's license; [☐] (other)

Phillip Fultz 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.

Nancy J. Forrester
Notary Public

Print Name: Nancy J. Forrester

My Commission expires 03/07/2008

Date: 6/15/05

T. Ashok
Inventor's Signature

Print full name of second inventor: **Ashok Tamilarasan**
Residence: Framingham, MA 01702
Citizenship: India
Mailing Address: 87 Georgetown Drive, Apt #11
Framingham, MA 01702

STATE/Commonwealth of Massachusetts
COUNTY OF Worcester

On this 15th day of June, 2005, then personally appeared before me the above-named Ashok Tamilarasan 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.

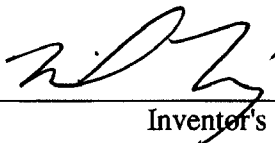
Nancy J. Forrester
Notary Public

Print Name: Nancy J. Forrester

My Commission expires 03/07/2008

Date:

6/15/05



Inventor's Signature

Print full name of third inventor:

Michael Manning

Residence:

Hopkinton, MA 01748

Citizenship:

United States of America

Mailing Address:

32 Briarcliff Drive

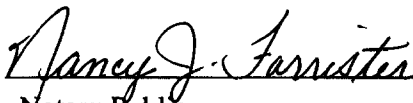
Hopkinton, MA 01748

STATE/Commonwealth of
COUNTY OF

Massachusetts
Worcester

On this 15th day of June, 2005, then personally appeared before me the
above-named Michael Manning known to me through satisfactory evidence of identification ☒
employee identification card; ☒ driver's license; ☐ (other)

Michael Manning 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 J. Forrester

My Commission expires 03/07/2008

Date:

6/15/2005

Thomas N. Dobb
Inventor's Signature

Print full name of fourth inventor:

Thomas Dobb

Residence:

Rutland, MA 01543

Citizenship:

United States of America

Mailing Address:

209 Pommogussett Road
Rutland, MA 01543

STATE/Commonwealth of
COUNTY OF

Massachusetts
Worcester

On this 15th day of June, 2005, then personally appeared before me the
above-named Thomas Dobb 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.

Nancy J. Forrester
Notary Public

Print Name: Nancy J. Forrester

My Commission expires 03/07/2008