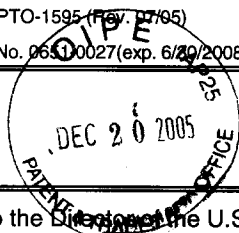


EMC-05-321



12-23-2005  
Barcode  
103143426

1 SHEET

Y

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

**1. Name of conveying party(ies)**

a) Adrianna D. Bailey, b) John V. Burroughs, c) John P. Didier, d) Morrie Gasser, e) Douglas E. Peeke and f) Matthew Long

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

**3. Nature of Conveyance/Execution Date(s):**

Execution Date: a) 10/19/05, b) 11/1/05, c) 10/28/05, d) 10/18/05, e) 10/17/05 and f) 10/31/05

- 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  No

**4. Application or patent number(s):**

This document is being filed together with a new application.

A. Patent Application No.(s) 11/238,601

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached?  Yes  No

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

Name: Jason A. Reyes, Esq.

Internal Address: EMC Corporation

Office of the General Counsel

Street Address: 176 South Street

City: Hopkinton State: MA Zip: 01748

Phone Number: 508-293-7074

Fax Number: 508-293-7189

Email Address: Reyes Jason@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
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

**8. Payment Information**

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

b. Deposit account number 05-0889

Authorized User Name Jason A. Reyes

**9. Signature:**

Jason A. Reyes Signature

12-15-05 Date

Jason A. Reyes, Esq.

Total number of pages including cover sheet, attachments, and documents: [ 16 ]

Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop: Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria VA 22313-1450

12/23/2005 ECOOPER 00000257 050889 11238601  
01 FC:8021 40.00 DA

**ASSIGNMENT**

**WHEREAS**, we, Adrianna D. Bailey, John V. Burroughs, John P. Didier, Morrie Gasser, Douglas E. Peeke and Matthew Long 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 *RAID DATA STORAGE SYSTEM WITH SAS EXPANSION*, 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 September 29, 2005 as U.S. Application No. 11/238,601;
- 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: 12/19/2005

Adrianna D Bailey  
Inventor's Signature

Print full name of first inventor:

**Adrianna D. Bailey**

Residence:

96 Elm Street, Upton, MA 01568

Citizenship:

United States of America

Mailing Address:

96 Elm Street, Upton, MA 01568

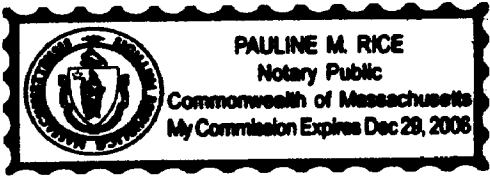
STATE/COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF NORFOLK

On this 19 day of October, 2005, then personally appeared before me the above-named Adrianna D. Bailey known to me through satisfactory evidence of identification  employee identification card;  driver's license;  (other) personally known to me 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.

Pauline M Rice  
Notary Public

Print Name: PAULINE M. RICE

My Commission expires 12/29/06



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

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

Print full name of second inventor:

**John V. Burroughs**

Residence:

39 Boulder Brook Road, East Sandwich, MA  
02537

Citizenship:

United States of America

Mailing Address:

39 Boulder Brook Road, East Sandwich, MA  
02537

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_, then personally appeared before me the above-named John V. Burroughs 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:

**John P. Didier**

Residence:

1 Lee Ann Circle, Westborough, MA 01581

Citizenship:

United States of America

Mailing Address:

1 Lee Ann Circle, Westborough, MA 01581

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_, then personally appeared before me the above-named John P. Didier 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:

**Morrie Gasser**

Residence:

28 South Mill Street, Hopkinton, MA 01748

Citizenship:

United States of America

Mailing Address:

28 South Mill Street, Hopkinton, MA 01748

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_, then personally appeared before me the above-named Morrie Gasser 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 E. Peeke**

Residence:

68 Hillside Drive, Shrewsbury, MA 01545-5814

Citizenship:

United States of America

Mailing Address:

68 Hillside Drive, Shrewsbury, MA 01545-5814

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named Douglas E. Peeke 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 sixth inventor:

**Matthew Long**

Residence:

538 Mendon Street, Uxbridge, MA 01569

Citizenship:

United States of America

Mailing Address:

538 Mendon Street, Uxbridge, MA 01569

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_, then personally appeared before me the above-named Matthew Long 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, Adrianna D. Bailey, John V. Burroughs, John P. Didier, Morrie Gasser, Douglas E. Peeke and Matthew Long 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 *RAID DATA STORAGE SYSTEM WITH SAS EXPANSION*, 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 September 29, 2005 as U.S. Application No. 11/238,601;
- 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:

**Adrianna D. Bailey**

Residence:

96 Elm Street, Upton, MA 01568

Citizenship:

United States of America

Mailing Address:

96 Elm Street, Upton, MA 01568

STATE/Commonwealth of \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, then personally appeared before me the above-named Adrianna D. Bailey 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: 11/1/05

John V Burroughs  
Inventor's Signature

Print full name of second inventor:

**John V. Burroughs**

Residence:

39 Boulder Brook Road, East Sandwich, MA  
02537

Citizenship:

United States of America

Mailing Address:

39 Boulder Brook Road, East Sandwich, MA  
02537

STATE/Commonwealth of Massachusetts  
COUNTY OF Worcester

On this 1 day of November, 2005, then personally appeared before me the above-named John V. Burroughs known to me through satisfactory evidence of identification  employee identification card;  driver's license;  (other)

John V. Burroughs 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.

Georgia Grammatikakis  
Notary Public

Print Name: Georgia Grammatikakis

My Commission expires 4/27/12

Date: 10/28/05

John P. Didier  
Inventor's Signature

Print full name of third inventor:

**John P. Didier**

Residence:

1 Lee Ann Circle, Westborough, MA 01581

Citizenship:

United States of America

Mailing Address:

1 Lee Ann Circle, Westborough, MA 01581

STATE/Commonwealth of  
COUNTY OF

Massachusetts  
Worcester

On this 28 day of October, 2005, then personally appeared before me the above-named John P. Didier known to me through satisfactory evidence of identification [ ] employee identification card; [  ] driver's license; [ ] (other)

John P. Didier 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.

Georgia Grammatikakis  
Notary Public

Print Name: Georgia Grammatikakis

My Commission expires 4/27/12

Date: 10/18/05

Morie Gasser  
Inventor's Signature

Print full name of fourth inventor: **Morrie Gasser**  
Residence: 28 South Mill Street, Hopkinton, MA 01748  
Citizenship: United States of America  
Mailing Address: 28 South Mill Street, Hopkinton, MA 01748

STATE/Commonwealth of Massachusetts  
COUNTY OF Worcester

On this 18 day of October, 2005, then personally appeared before me the above-named Morrie Gasser known to me through satisfactory evidence of identification [ ] employee identification card; [  ] driver's license; [ ] (other) Morie Gasser 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.

Georgia Grammatikakis  
Notary Public

Print Name: Georgia Grammatikakis  
My Commission expires 4/27/12

Date: 10/17/05

Douglas E. Peeke  
Inventor's Signature

Print full name of fifth inventor:

**Douglas E. Peeke**

Residence:

68 Hillside Drive, Shrewsbury, MA 01545-5814

Citizenship:

United States of America

Mailing Address:

68 Hillside Drive, Shrewsbury, MA 01545-5814

STATE/Commonwealth of  
COUNTY OF

Massachusetts  
Worcester

On this 17 day of October, 2005, then personally appeared before me the above-named Douglas E. Peeke known to me through satisfactory evidence of identification [ ] employee identification card; [  ] driver's license; [ ] (other)  
Douglas E. Peeke 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.

Georgia Grammatikakis  
Notary Public

Print Name: Georgia Grammatikakis  
My Commission expires 4/27/2012

Date: 10/31/05

[Signature]  
Inventor's Signature

Print full name of sixth inventor: **Matthew Long**  
Residence: 538 Mendon Street, Uxbridge, MA 01569  
Citizenship: United States of America  
Mailing Address: 538 Mendon Street, Uxbridge, MA 01569

STATE/Commonwealth of Massachusetts  
COUNTY OF Worcester

On this 31 day of October, 2005, then personally appeared before me the above-named Matthew Long known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) Matthew Long 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: Georgia Grammatikani's  
My Commission expires 4/27/2012