

01 - 30 - 2001

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027



U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

101598582

Re: 1-17-01

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

**TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).**

**Submission Type**

New

Resubmission (Non-Recordation)  
Document ID# 101492104

Correction of PTO Error  
Reel # [ ] Frame # [ ]

Corrective Document  
Reel # [ ] Frame # [ ]

**Conveyance Type**

Assignment  Security Agreement

License  Change of Name

Merger  Other [ ]

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File  Secret File

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1) Ericson, George M. Execution Date 9/25/2000

Name (line 2) [ ]

**Second Party**

Name (line 1) Solomon, Robert C. Execution Date 1/10/2001

Name (line 2) [ ]

**Receiving Party**

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1) EMC Corporation

Name (line 2) A Corporation of Massachusetts

Address (line 1) 35 Parkwood Drive

Address (line 2) [ ]

Address (line 3) Hopkinton Massachusetts 01748  
City State/Country Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name [ ]

Address (line 1) [ ]

Address (line 2) [ ]

Address (line 3) [ ]

Address (line 4) [ ]

**FOR OFFICE USE ONLY**

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:  
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

**PATENT**  
**REEL: 011463 FRAME: 0830**

**Correspondent Name and Address**

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages** Enter the total number of pages of the attached conveyance document including any attachments. #

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number

only if a U.S. Application Number has not been assigned.

PCT  PCT  PCT   
PCT  PCT  PCT

**Number of Properties**

Enter the total number of properties involved. #

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment:  
Deposit Account

Enclosed  Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: #

Authorization to charge additional fees: Yes  No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Robert L. Dulaney

1/12/2001

Name of Person Signing

Signature

Date

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)  City  State/Country  Zip Code

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Patent Number(s)

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10-20-2000



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*mrd 9/28/00*

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

10/18/2000  
09/670933



TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

**New**

**Resubmission (Non-Recordation)**  
Document ID#

**Correction of PTO Error**  
Reel #  Frame #

**Corrective Document**  
Reel #  Frame #

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**License**  **Change of Name**

**Merger**  **Other**

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

**Departmental File**  **Secret File**

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1) **ERICSON, GEORGE M.**

Execution Date  
Month Day Year  
**9-25-2000**

Name (line 2)

**Second Party**

Name (line 1) **SOLOMON, ROBERT C.**

Execution Date  
Month Day Year

Name (line 2)

**Receiving Party**

Mark if additional names of receiving parties attached

10/18/2000  
04 FC:581  
Name (line 1) **EMCO CORPORATION**

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2) **A CORPORATION OF MASSACHUSETTS**

Address (line 1) **171 SOUTH STREET**

Address (line 2)

Address (line 3) **HOPKINTON** **MASSACHUSETTS** **01748**  
City State/Country Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**FOR OFFICE USE ONLY**

**Correspondent Name and Address** Area Code and Telephone Number 508-435-1000

Name ROBERT L. DULANEY

Address (line 1) EMC CORPORATION

Address (line 2) 35 PARKWOOD DRIVE

Address (line 3) HOPKINTON, MA 01748

Address (line 4) \_\_\_\_\_

10825 U.S. PTO  
 09/16/99 33  
 09/28/00

**Pages** Enter the total number of pages of the attached conveyance document including any attachments. # 3

**Application Number(s) or Patent Number(s)**  Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)			Patent Number(s)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year 9-25-2000

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT  PCT  PCT

PCT  PCT  PCT

**Number of Properties** Enter the total number of properties involved. # 1

**Fee Amount** Fee Amount for Properties Listed (37 CFR 3.41): \$ 40

Method of Payment: Enclosed  Deposit Account

Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)

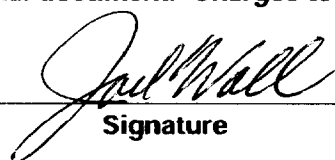
Deposit Account Number: # 05-0889

Authorization to charge additional fees: Yes  No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

JOEL WALL Name of Person Signing

 Signature

9-28-2000 Date

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

BROWN, JEFFREY A.

Name (line 2)

Name (line 1)

HAYNES, JOHN E.

Name (line 2)

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

9-25-2000

Execution Date  
Month Day Year

9-25-2000

Execution Date  
Month Day Year

10825 U.S. PTO  
09/26/00  
09/26/00

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

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Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)



**ASSIGNMENT**

WHEREAS, We: George M. Ericson of 119 Bumble Bee Circle, Shrewsbury, MA, 01545; Robert C. Solomon of 11 Cottage Road, Kensington, NH, 03833; Jeffrey A. Brown of 3 Birch Brush Road, Shrewsbury, MA 01545; and, John E. Haynes, Jr. of 46 Millstone Lane, South Weymouth, MA, 02190 have invented certain new and useful improvements in

**SWITCH-BASED ACCELERATION OF COMPUTER DATA STORAGE EMPLOYING AGGREGATIONS OF DISK ARRAYS**

which are described and claimed in an Application for United States Letters Patent in respect of which a Declaration and Power of Attorney is executed on even date herewith.


WHEREAS, EMC CORPORATION, a corporation organized and existing under and by virtue of the laws of the Commonwealth of Massachusetts, and having its principal place of business at 171 South Street, Hopkinton, Massachusetts 01748, is desirous of acquiring the entire interest in and to said invention, said Application and the Letters Patent to be obtained therefor.

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency whereof are hereby acknowledged, We have sold, assigned, and set over, and by these presents do hereby sell, assign and set over to the said EMC CORPORATION, and said assignee's legal representatives, successors, and assigns, the entire right, title and interest in and to said invention, said Application and the Letters Patent, both foreign and domestic, that may or shall issue thereon including the right to claim in respect of any subsequent corresponding foreign patent applications and patents, the priority date of the said application under any international treaty; and We do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to the above identified assignee in agreement with the terms of this Agreement.

UPON SAID CONSIDERATION, We do hereby covenant and agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will at any time upon request, without further or additional consideration, but at the expense of the said assignee, execute such additional assignments and other writings and such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and

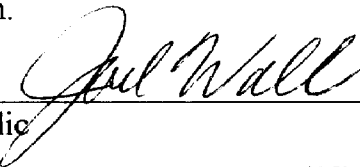
in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns, heirs, and legal representatives of all parties hereto.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 25 day of September, 2000

Name: **GEORGE M. ERICSON** Seal: 


United States of America  
Commonwealth of Massachusetts  
County of Worcester

On this 25<sup>th</sup> day of September, 2000, before me personally appeared **GEORGE M. ERICSON** to me proved to be the person described in the foregoing Assignment, who acknowledged that he executed the foregoing Assignment of his own free will for the purposes therein set forth.

  
Notary Public


JOEL WALL  
Notary Public  
My Commission Expires February 12, 2004

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 10<sup>th</sup> day of JANUARY, 2001

Name: **ROBERT C. SOLOMON** Seal: 

United States of America  
Commonwealth of Massachusetts  
County of Worcester

On this 10<sup>th</sup> day of JANUARY, 2001, before me personally appeared **ROBERT C. SOLOMON**, to me proved to be the person described in the foregoing Assignment, who acknowledged that he executed the foregoing Assignment of his own free will for the purposes therein set forth

  
Notary Public

ANGELA E. MUISE  
Notary Public  
My Commission Expires February 12, 2004



IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this  
25 day of September, 2000

Name: **JEFFREY A. BROWN**

Seal: *Jeffrey A. Brown*

United States of America  
Commonwealth of Massachusetts  
County of Worcester

On this 25<sup>th</sup> day of September, 2000, before me personally  
appeared **JEFFREY A. BROWN**, to me proved to be the person described in the  
foregoing Assignment, who acknowledged that he executed the foregoing Assignment of  
his own free will for the purposes therein set forth.

*Joel Wall*  
Notary Public

JOEL WALL  
Notary Public  
My Commission Expires February 12, 2004

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this  
25 day of SEPTEMBER, 2000

Name: **JOHN E. HAYNES, JR.,**

Seal: *John E. Haynes, Jr.*

United States of America  
Commonwealth of Massachusetts  
County of Worcester

On this 25<sup>th</sup> day of September, 2000, before me personally  
appeared **JOHN E. HAYNES, JR.,** to me proved to be the person described in the  
foregoing Assignment, who acknowledged that he executed the foregoing Assignment of  
his own free will for the purposes therein set forth.

*Joel Wall*  
Notary Public

JOEL WALL  
Notary Public  
My Commission Expires February 12, 2004