



103359074

ORDINATION FORM COVER SHEET
PATENTS ONLY

Docket No.: EMS-151US1

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

12.29.06

1. Name of conveying party(ies)/Execution Date(s):
(a) Gary H. COX; (b) Mark J. HALSTEAD;
(c) Douglas E. LECRONE; (d) Marik MARSHAK;
(e) Brett A. QUINN; (f) Mike SPECHT

Execution Date(s): (b) (c) (d) December 28, 2006
 (a) (e) (f) December 29, 2006

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

2. Name and address of receiving party(ies):
 Name: **EMC Corporation**
 Internal Address:
 Street Address: **176 South Street**
Hopkinton, Massachusetts 01748

Country: **United States of America**

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

113235 U.S. PTO
11/648770



122906

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other: _____

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)

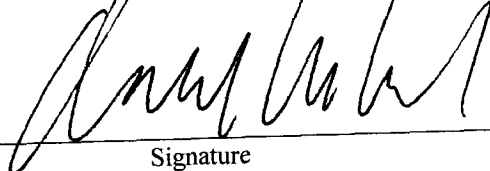
Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:
 Name: **Muirhead and Saturnelli, LLC**
 Internal Address:
 Street Address: **200 Friberg Parkway**
Suite 1001
 City: **Westborough**
 State: **Massachusetts** Zip: **01581**
 Fax Number: **508-898-8602**

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41).....\$ **40.00**
 Authorized to be charged 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 **050889**
 Authorized User Name _____

9. Signature:

Donald W. Muirhead, Reg. No. 33,978
 Name of Person Signing

December 29, 2006
 Date

00000092 50889 40.00 DA
01/09/2007 NJRMA 11648770
01 FC:8021

Total number of pages including cover sheet, attachments, and documents: 9

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, Gary H. Cox, Mark J. Halstead, Douglas E. Lecrone, Marik Marshak, Brett A. Quinn, Mike Specht, and Benjamin W. Yoder 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 TOGGLING BETWEEN CONCURRENT AND CASCADED TRIANGULAR ASYNCHRONOUS REPLICATION, 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: 12/29/06



Inventor's Signature

Print full name of first inventor:

Gary H. COX

Residence:

3 Monterey Drive
Franklin, MA 02038

Citizenship:

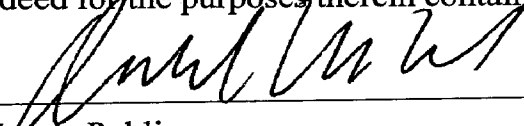
U.S.A.

Mailing Address:

Same

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Norfolk

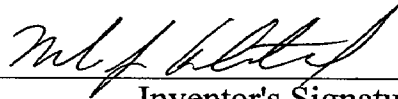
On this 29th day of December, 2006, then personally appeared before me the above-named Gary H. COX known to me through satisfactory evidence of identification employee identification card; driver's license; (other) personally known to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.



Notary Public

Print Name: Donald W. Merheal
My Commission expires: February 8, 2013

Date: Dec 28, 2006

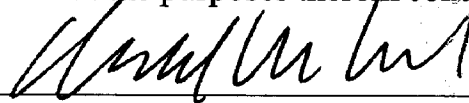


Inventor's Signature

Print full name of second inventor:	Mark J. HALSTEAD
Residence:	1545 Highland Street Holliston, MA 01746
Citizenship:	USA
Mailing Address:	Same

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Middlesex

On this 28th day of December, 2006, then personally appeared before me the above-named Mark J. Halstead known to me through satisfactory evidence of identification employee identification card; driver's license; (other) personally known 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.

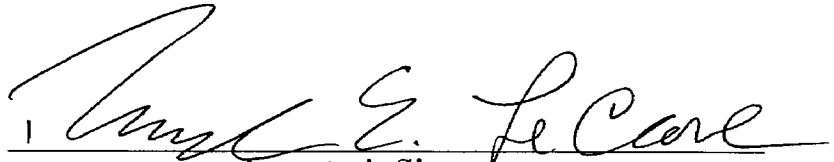


Notary Public

Print Name: Donald W. Mirhead

My Commission expires: February 8, 2013


Date: 12/28/06


Inventor's Signature

Print full name of third inventor: **Douglas E. LECRONE**
Residence: 10 Bowker Road
Hopkinton, MA 01748
Citizenship: USA
Mailing Address: Same

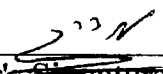
COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Middlesex

On this 28th day of December, 2006, then personally appeared before me the above-named Douglas E. Lecrone known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) personally known 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: Donald W. Muirhead
My Commission expires: February 28, 2013

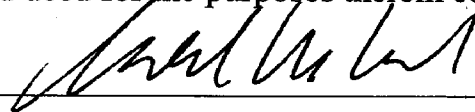
Date: Dec 28 06


Inventor's Signature

Print full name of fourth inventor: **Marik MARSHAK**
Residence: 36 Tanglewood Road
Newton, MA 02459
Citizenship: Israel
Mailing Address: Same

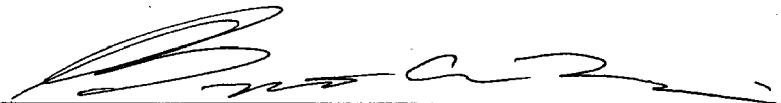
COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Middlesex

On this 28th day of December, 2006, then personally appeared before me the above-named Marik Marshak known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) personally known 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: Donald W. Muirhead
My Commission expires: February 8, 2013

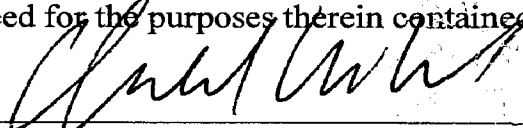
Date: 12/29/06


Inventor's Signature

Print full name of fifth inventor: **Brett A. QUINN**
Residence: 19 DuCarl Drive
Lincoln, RI 02865
Citizenship: USA
Mailing Address: Same

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Norfolk

On this 29th day of December, 2006, then personally appeared before me the above-named Brett A. QUINN known to me through satisfactory evidence of identification employee identification card; driver's license; (other) personally known 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: Donald W. Mirkhead
My Commission expires: February 8, 2013

Date: Dec 29, 2006



Inventor's Signature

Print full name of sixth inventor:

Mike SPECHT

Residence:

423 Arlington Street

Acton, MA 01720

Citizenship:

USA

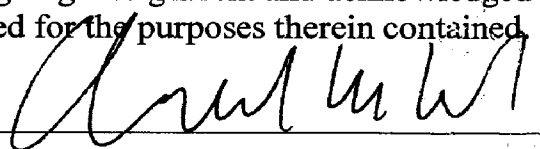
Mailing Address:

Same

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF Worcester

On this 29th day of December, 2006, then personally appeared before me the above-named Mike Specht known to me through satisfactory evidence of identification employee identification card; driver's license; (other) personally known 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

Notary Public

Print Name: Donald W. Muirhead

My Commission expires: February 8, 2013

Date:

Inventor's Signature

Print full name of seventh inventor:

Benjamin W. YODER

Residence:

1400 Worcester Road, Apt. 7209

Framingham, MA 01702

Citizenship:

U.S.A.

Mailing Address:

Same

STATE OF _____

COUNTY OF _____

On this ____ day of December, 2006, then personally appeared before me the above-named Benjamin W. Yoder 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: