To the Commissioner of Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
   Zoran Cakeljic, Yuval Ofek, Samuel Krikler, Sharon Glatzur, Michael Hirsch, Dan Arnon and Peter Kamvysselis

2. Name and address of receiving party(ies)
   Name: EMC Corporation
   Internal Address:
   Street Address: 171 South Street, Hopkinton, MA 01748-9103

3. Nature of conveyance:
   [X] Assignment
   [ ] Merger
   [ ] Security Agreement
   [ ] Change of Name
   [ ] Other


4. Application number(s) or patent number(s):
   If this document is being filed together with a new application, the execution date of the application is
   A. Patent Application No.(s)
      09/224,896
   B. Patent No.(s)

5. Name and address of party to whom correspondence Concerning document should be mailed:
   Name: Matthew B. Lowrie
   Address: WOLF, GREENFIELD & SACKS, P.C.
            Federal Reserve Plaza
            600 Atlantic Avenue
            Boston, MA 02210

6. Total number of applications and patents involved: [1]

7. Total fee (37 CFR 3.41)...........................................$ 40.00
   [X] Enclosed
   [ ] Authorized to be charged to deposit account

   The Commissioner is authorized to charge:

8. Deposit Account No: 23/2825

9. 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.

   Matthew B. Lowrie
   Name of Person Signing
   Signature
   May 3, 1999
   Date

   Total number of pages including cover sheet, attachments, and document: [12]

Mail documents to be recorded with required cover sheet information to:
Box Assignment, Commissioner of Patents,
Washington, D.C.  20231
ASSIGNMENT

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned Yuval Ofek, 20 Lanterns Road, Framingham, MA 01702; Zoran Cakeljic, 135 Florence Street #19, Newton, MA 02467; Samuel Krikler, Boaz 6/6, Ramat HaSharon 47402, Israel; Sharon Galtzur, Kedoshey Kahiv 6, Holon, Israel; Michael Hirsch, 12B Ha-atzmaut, Mazkeret Batya, 76804, Israel; Dan Arnon, 78 Montgomery Street, Boston, MA 02116; Peter Kamvysselis, 215 Newbury Street, #42, Boston, MA 02116 hereby

Sell, assign and transfer to EMC Corporation, a Massachusetts corporation having a place of business at 171 South Street, Hopkinton, MA 01748-9103, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, the entire right, title and interest for the United States and all foreign countries, in and to any and all inventions which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on December 31, 1998 under Serial No. 09/224,896 and entitled APPARATUS AND METHODS FOR COPYING, BACKING UP, AND RESTORING DATA USING A BACKUP SEGMENT SIZE LARGER THAN THE STORAGE BLOCK SIZE, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said inventions; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said inventions including the right to apply for patent rights in each foreign country and all rights to priority.

We agree that said Assignee may apply for and receive Letters Patent for said inventions in its own name; and when requested, without charge to but at the expense of said Assignee, we agree to carry out in good faith the intent and purpose of this assignment, by executing all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to us relating to said inventions and the history thereof, and generally by doing everything possible which said Assignee shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee.

We hereby request the Honorable Commissioner of Patents and Trademarks to
issue said Letters Patent to said Assignee.

We covenant with said Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

[Signature]

Date

YUVAL OFEK

STATE OF Massachusetts:
COUNTY OF Middlesex:

Subscribed and sworn to before me this 23 day of April 1999.

Seal

[Seal]

Heatherlyn Laboute
Notary Public

My Commission Expires April 21, 2006

My Commission Expires ________________

Date

ZORAN CAKELJIC

STATE OF Massachusetts:
COUNTY OF Middlesex:

Subscribed and sworn to before me this 23 day of April 1999.

Seal

[Seal]

Heatherlyn Laboute
Notary Public

My Commission Expires April 21, 2006

My Commission Expires ________________
STATE OF Massachusetts:
COUNTY OF Middlesex:

Subscribed and sworn to before me this ___ day of April 1999.

SEAL

Heather Lynn LaPointe
Notary Public
My Commission Expires April 21, 2000

Date

SHARON GALTZUR

STATE OF ____________________:
COUNTY OF ____________________:

Subscribed and sworn to before me this ___ day of ____________________.

SEAL

Notary Public
My Commission Expires April 21, 2000
STATE OF __________________________:
COUNTY OF ________________________:

Subscribed and sworn to before me this ___ day of ____________________.

SEAL

__________________________
Notary Public

My Commission Expires ________________

__________________________
Date

DAN ARNON

STATE OF Massachusetts:
COUNTY OF Middlesex:

Subscribed and sworn to before me this ___ day of April, 1999.

SEAL

__________________________
Notary Public

My Commission Expires ________________

__________________________
My Commission Expires April 21, 2000

243107.1
Date: 4/27/99

PETER KAMVYSSELIS

STATE OF Massachusetts:
COUNTY OF Middlesex:

Subscribed and sworn to before me this 21st day of April 1999.

SEAL

Heather Lyn Labonte
Notary Public

My Commission Expires 4/21/2000
ASSIGNMENT

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned Yuval Ofek, 20 Lanterns Road, Framingham, MA 01702; Zoran Cakeljic, 135 Florence Street #19, Newton, MA 02467; Samuel Krikler, Boaz 6/6, Ramat HaSharon 47402, Israel; Sharon Galtzur, Kedoshey Kahiv 6, Holon, Israel; Michael Hirsch, 12B Ha-atzmaut, Mazkeret Batya, 76804, Israel; Dan Arnon, 78 Montgomery Street, Boston, MA 02116; Peter Kamvysselis, 215 Newbury Street, #42, Boston, MA 02116 hereby

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We agree that said Assignee may apply for and receive Letters Patent for said inventions in its own name; and when requested, without charge to but at the expense of said Assignee, we agree to carry out in good faith the intent and purpose of this assignment, by executing all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to us relating to said inventions and the history thereof, and generally by doing everything possible which said Assignee shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee.

We hereby request the Honorable Commissioner of Patents and Trademarks to
issue said Letters Patent to said Assignee.

We covenant with said Assignee that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

_____________________________  ______________________________
                          Date                                      YUVAL OFEK

STATE OF __________________________ :  
COUNTY OF __________________________ :  

Subscribed and sworn to before me this ___ day of ________________________.

SEAL

_____________________________  Notary Public

My Commission Expires ____________________

_____________________________  ______________________________
                          Date                                      ZORAN CAKELJIC

STATE OF __________________________ :  
COUNTY OF __________________________ :  

Subscribed and sworn to before me this ___ day of ________________________.

SEAL

_____________________________  Notary Public

My Commission Expires ____________________
Date SAML KRIKLER

STATE OF ____________________ :
COUNTY OF ____________________ :

Subscribed and sworn to before me this ___ day of ____________________ .

SEAL

________________________
Notary Public

My Commission Expires _____________

________________________
SHARON GALTZUR

Date April 19, 1999

STATE OF ____________________ :
COUNTY OF ____________________ :

Subscribed and sworn to before me this 19 day of April 1999.

SEAL

________________________
Notary Public

My Commission Expires _____________
STATE OF ____________________:
COUNTY OF ____________________:

Subscribed and sworn to before me this 19 day of April 1999.

Notary Public

My Commission Expires ____________________

Date ____________________

DAN ARNON

STATE OF ____________________:
COUNTY OF ____________________:

Subscribed and sworn to before me this ______ day of ____________________

Notary Public

My Commission Expires ____________________