



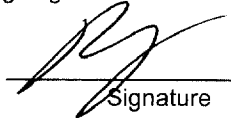


3-31-03

Form PTO-1595 (Rev. 03/01)		REC-04-09-2003	Atty Dkt No.: EMC2-140PUS
OMB No. 0651-0027 (exp. 5/31/2002)			U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
Tab settings    ▼ ▼		▼ ▼	
To the Honorable Commissioner of Pat.		102412879	Original documents or copy thereof.
<b>1. Name of conveying party(ies):</b> Ofar Porat Brian K. Campbell Yujie Xu Eric J. Bruno  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>2. Name and address of receiving party(ies)</b> Name: <u>EMC Corporation</u>  Internal Address: _____    Street Address: <u>35 Parkwood Drive</u>   City: <u>Hopkinton</u> State: <u>MA</u> Zip: <u>01748</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>3. Nature of conveyance:</b>  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____  Execution Date: <u>3/28/03</u>			
<b>4. Application number(s) or patent number(s):</b> If this document is being filed together with a new application, the execution date of the application is: <u>3/28/03</u> A. Patent Application No.(s) <u>10403263</u> B. Patent No.(s) <u>3/28/03</u>  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>5. Name and address of party to whom correspondence concerning document should be mailed:</b> Name: <u>Richard M. Sharkansky</u> <u>Daly, Crowley &amp; Mofford, LLP</u> Internal Address: _____    Street Address: <u>275 Turnpike Street, Suite 101</u>   City: <u>Canton</u> State: <u>MA</u> Zip: <u>02021-2354</u>		<b>6. Total number of applications and patents involved:</b> <u>1</u>  <b>7. Total fee (37 CFR 3.41).....\$</b> <u>40.00</u>  <input checked="" type="checkbox"/> Enclosed  <input type="checkbox"/> Authorized to be charged to deposit account  <b>8. Deposit account number:</b>  <u>50-0845</u>  (Attach duplicate copy of this page if paying by deposit account)	
<b>DO NOT USE THIS SPACE</b>			
<b>9. Statement and signature.</b>  <i>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.</i>  Richard M. Sharkansky Reg. No. 25,800 Name of Person Signing   Signature  <u>3-31-03</u> Date  Total number of pages including cover sheet, attachments, and documents: <u>6</u>			

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

PATENT  
REEL: 013918 FRAME: 0454

## A S S I G N M E N T

Whereas we, the undersigned, Ofer Porat, Brian K. Campbell, Jane Xu, and Eric J. Bruno, hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled DATA STORAGE SYSTEM, identified as Attorney Docket No. EMC2-140PUS and Client Case No. EMC-02-186, which application was executed on \_\_\_\_\_ and filed on \_\_\_\_\_ and Assigned Application No. \_\_\_\_\_. In the event that the execution date, filing date and/or Application No. are not entered above at the time we executed this document, and if such information is deemed necessary, we hereby authorize and request our attorneys at Daly, Crowley & Mofford, LLP, 275 Turnpike Street, Suite 101, Canton, MA 02021-2354, to insert above the execution date, filing date and/or Application No. of said application.

Whereas, EMC Corporation, a Massachusetts Corporation having a place of business at 176 South Street, Hopkinton, MA 01748-9103, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, re-examination and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;

3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;


5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to our names.

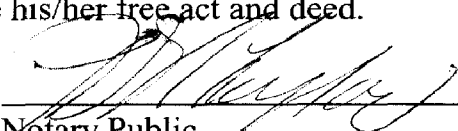
State or Commonwealth of MASSACHUSETTS

County DUNSTABLE

Dated MARCH 25, 2003

  
\_\_\_\_\_  
Ofer Porat

On this 25<sup>TH</sup> day of MARCH, 2003, before me appeared Ofer Porat, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
\_\_\_\_\_  
Notary Public

MY COMMISSION EXPIRES  
MAY 30, 2003

PATENT

Filed On: Filed Herewith

Attorney Docket No.: EMC2-140PUS

State or Commonwealth of

MASSACHUSETTS

County

SUFFOLK

Dated

MARCH 25, 2003

Brian K. Campbell

Brian K. Campbell

On this 25<sup>TH</sup> day of MARCH, 2003, before me appeared Brian K. Campbell, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

[Signature]  
Notary Public

COMMISSION EXPIRES  
MAY 30, 2008

PATENT

REEL: 013918 FRAME: 0457

PATENT

Filed On: Filed Herewith

Attorney Docket No.: EMC2-140PUS

State or Commonwealth of MASSACHUSETTS

County MIDDLESEX

Dated MARCH 28, 2003

yujie Jane Xu

On this 28<sup>TH</sup> day of MARCH, 2003, before me appeared Jane Xu, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

[Signature]  
Notary Public

COMMISSION EXPIRES  
MAR 05, 2008

State or Commonwealth of MASSACHUSETTS  
County MIDDLESEX  
Dated MARCH 28, 2003

Eric J. Bruno  
Eric J. Bruno

On this 28<sup>TH</sup> day of MARCH, 2003, before me appeared Eric J. Bruno, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

[Signature]  
Notary Public

COMMISSION EXPIRES  
MAY 30, 2008

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