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Attorney Docket No.: EMC01-15(01072)

SHEET

Stefano Sguazzin Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Street Address: Stre	ドークク・ハ	™™™™™™ 2004.46
Stefano Sguazzin Internal Address: Internal Address: Internal Address: Internal Address: Internal Address: Street Address: Stre		narks: Please record the attached original documents or copy thereof.
3. Nature of conveyance: [X Assignment	Moshe Schreiber Arod Shatil	Name: EMC Corporation
[] Security Agreement [] Change of Name	Additional name(s) of conveying party(ies) attached? [] Yes [X] No	
Additional name(s) & address(es) attached? [] Yes [X] No 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: May 21, 2001 B. Patent No.(s) D9 / 86 28 8 3 2001 DIESSENI 0000018 09862813 2013 2020 DIESSENI 0000018 09862813 2031 2040 DIESSENI 0000018 09862813 2051 Additional numbers attached? [] Yes [X] No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David E. Huang, Esq. Internal Address: CHAPIN & HUANG, L.L.C. Total Fee (37 C.F.R. 3.41)		Street Address: 35 Parkwood Avenue
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: May 21, 2001 A. Patent Application No.(s) B. Patent No.(s) D9 / \$62813 1501 40.00 DP Additional numbers attached? [] Yes [x] No 5. Name and address of party tention correspondence concerning document should be mailed: Name: David E. Huang, Esq. Internal Address: CHAPIN & HUANG, L.L.C. CHAPIN & HUANG, L.L.C. To the best formy knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. David E. Huang David E. Huang David E. Huang May 21, 2001	[] Other	
If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) D9 / 862813 1581 40.00 DP Additional numbers attached? [] Yes [x] No 5. Name and address of party to without correspondence concerning document should be mailed: Name: David E. Huang, Esq. Internal Address: CHAPIN & HUANG, L.L.C. Total Fee (37 C.F.R. 3.41)	Execution Date: May 21, 2001	Additional name(s) & address(es) attached? [] Yes [X] No
Concerning document should be mailed: Name: David E. Huang, Esq. Internal Address: CHAPIN & HUANG, L.L.C. Street Address: Westborough Office Park 1700 West Park Drive City: Westborough State: MA ZIP: 01581 DO NOT USE THIS SPACE 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. David E. Huang 7. Total Fee (37 C.F.R. 3.41)\$ 40.00 [X] Enclosed with application filing fee [X] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to be charged to deposit account Street Address: Westborough Office Park 8. Deposit account number: 50-0901 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. David E. Huang May 21, 2001	A. Patent Application No.(s) /2001 DTESSEN1 00000018 09862813 :581 40.00 DP Additional num	B. Patent No.(s) 09/8628/3 there attached? [] Yes [x] No
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CHAPIN & HUANG, L.L.C. [X] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to be charged to deposit accoun	Name: David E. Huang, Esq.	7. Total Fee (37 C.F.R. 3.41) \$ 40.00
Tothe 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. David E. Huang David		[X] Authorized to charge any deficiencies or credit any overpayment to deposit account
City: Westborough State: MA ZIP: 01581 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. David E. Huang May 21, 2001	Street Address: Westborough Office Park	8. Deposit account number:
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Nome of Dancen Circuina Cianatura Data	David E. Huang Name of Person Signing	Signature May 21, 2001 Date

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

[5]

Joint

ASSIGNMENT

WHEREAS, we, Moshe Schreiber, Arod Shatil and Stefano Sguazzin, have invented a certain improvement in METHODS AND APPARATUS FOR PERFORMING A MAINTENANCE PROCEDURE ON A DATA STORAGE SYSTEM described in an application for Letters Patent of the United States, the specification of which:

[X]	is being executed on even date herewith and is about to be filed in the United States Patent Office;			
[]	was filed ona	s U.S. Application No.	-	
[]	was patented under U.S. Patent N	o		
MANUEDEA O ELACO CONTESTO CONT				

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 35 Parkwood Drive, 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 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

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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 the date set forth below.

(SEAL)

Inventor: Moshe Schreiber
State/Commonwealth of Massachusetts County of Middlesex
Then personally appeared before me the above-named Moshe Schreiber and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 21 day of May, 2001. LINDA M. VALANZOLA Notary Public Commonwealth of Massachusetts My Commission Expires

My Commission expires / /

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Inve	entor: Arod Shatil	
State/Commonwealth of <u>Massachusett</u> County of <u>Middlese</u>		
- · · · · · · · · · · · · · · · · · · ·	red before me the above-named Arod Shatil and he executed the foregoing instrument as his/her along day of May 2001.	
(SEAL)	LINDA M. VALANZOLA Notary Public Commonwealth of Massachusetts My Commission Expires August 23, 2007 My Commission expires//	la

-4-

Inventor: Stefano Squazzin

State/Commonwealth
of Massachusetts
County of Middle sex

RECORDED: 05/22/2001

Then personally appeared before me the above-named Stefano Sguazzin and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this <u>al</u> day of <u>May</u>, 2001.

(SEAL)

LINDA M. VALANZOLA
Notary Public
Commonwealth of Massachusetts
My Commission Expires
August 23, 2007

My Commission expires

My Commission expires

/ /