3.23.01

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

01 FC

04-16-2001



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

101675300

RECORDATION FORM COVER SHEET					
PATENTS ONLY TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).					
Submission		Conveyance Type	nocument(s) or copy(les).		
X New		X Assignment Security	Agreement		
Resubmi Documer	ssion (Non-Recordation) nt ID#	License Change o	f Name		
Reel #	on of PTO Error Frame #	Merger Other U.S. Governm	nent		
Correctiv	e Document Frame #	(For Use ONLY by U.S. Govern Departmental File	Secret File		
Conveying F	Party(ies)	X Mark if additional names of conveying	- Execution Date		
Name (line 1)	William R. Fairchil	đ	3/1/01		
Name (line 2)			Execution Date		
Second Party Name (line 1)	Douglas E. LeCrone		Month Day Year 3/1/01		
Name (line 2)					
Receiving Party Mark if additional names of receiving parties attached					
Name (line 1)	EMC Corporation		If document to be recorded is an assignment and the		
Name (line 2)			receiving party is not domiciled in the United States, an appointment		
Address (line 1)	35 Parkwood Drive		of a domestic representative is attached. (Designation must be a		
Address (line 2)			separate document from Assignment.)		
Address (line 3)	Hopkinton City	MA 01	748 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)					
	000020 050889 09731244 FC	PR 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: 011670 FRAME: 0840

FORM PTO-1619C Expires 06/30/99

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Con	merce
Patent and Trademark C)ffice
DATENT	

OMB 0651-0027	PATENTS ONLY	PATENT		
Conveying P	arty(ies) Mark if additional names of conveying parties attached Conveying Parties	Execution Date		
Name (line 1)		Month Day Year		
14d1116 (iiiie 1)	Daniel A. Murphy	3/1/01		
Name (line 2)		Execution Date Month Day Year		
Name (line 1)				
Name (fine 2)		Execution Date		
Name (line 1)		Month Day Year		
Name (line 2)		·		
Receiving Pa		s attached		
Enter additional i	Receiving Party(ies)			
Name (line 1)		if document to be recorded is an assignment and the		
Name (line 2)		receiving party is not domiciled in the United States, an appointment		
Address (line 1)		of a domestic representative is attached. (Designation must be a separate		
Address (line 2)		document from Assignment.)		
Address (line 3)	City State/Country Zip Code			
Name (line 1)		If document to be recorded is an assignment and the		
Name (line 2)		receiving party is not domiciled in the United States, an appointment of a		
Address (line 1)		domestic representative is attached. (Designation must be a separate document from		
Address (line 2)		Assignment.)		
Address (fine 3)	City State/Country Zip Cou	de		
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).				
Pat	tent Application Number(s) Patent Number	<u>r(</u> s)		

PATENT

REEL: 011670 FRAME: 0841

FORM PTO Expires 06/30/99 OMB 0651-0027	-1619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT	
Corresponde	ent Name and Address A	rea Code and Telephone Number	(978) 452-1971	
Name	George A. Herbster	. Esq.		
Address(line 1)	Pearson & Pearson			
Address (line 2)	10 George Street			
Address (line 3)	Lowell, MA 01852			
Address (line 4)				
Pages	Enter the total number of pages including any attachments.	of the attached conveyance docur	ment # 4	
• •	Number(s) or Patent Numbe	· · · · · · · · · · · · · · · · · · ·	additional numbers attached	
		t Number (DO NOT ENTER BOTH numbers		
09/731,244		Pater	Ion was Month Day Year	
signed by the first	named executing inventor.			
Enter only	eration Treaty (PCT) PCT application number if a U.S. Application Number pot been assigned.		PCT PCT	
Number of Properties Enter the total number of properties involved. # 1				
Fee Amount	Fee Amount for P	roperties Listed (37 CFR 3.41):	40.00	
Method of Payment: Enclosed Deposit Account X Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.) Deposit Account Number: # 05-0889				
	Autho	orization to charge additional fees:	Yes X No	
Statement an	d 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.				
	Herbster	Lin a Hulst	3/21/2001	
Name o	of Person Signing	Signature	Date	

ASSIGNMENT

WHEREAS We, William R. Fairchild of 126 Chestnut Street, Douglas, MA 01516 and Douglas E. LeCrone of 6 Falcon Ridge Drive, Hopkinton,
Massachusetts 01748 and Daniel A. Murphy of 25 Highcroft Way, Hopkinton,
Massachusetts 01748, citizens of the United States of America (hereinafter called Assignors) have invented certain new and useful improvements in AN OPERATING SYSTEM FOR GENERATING OVERLAPPED INPUT-OUTPUT REQUESTS
TO A DEVICE IN A DISK ARRAY STORAGE DEVICE for which an application for United States Letters Patent was filed on December 6, 2000, Serial No. 09/731,244; and

WHEREAS EMC Corporation, a corporation duly organized under the Laws of the Commonwealth of Massachusetts, located at 35 Parkwood Drive, Hopkinton, County of Middlesex, Massachusetts, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of Ten (\$10.00) Dollars, the receipt of which is hereby acknowledged, and other good and valuable consideration, Assignors have sold, assigned and transferred and by these presents do sell, assign and transfer unto the said EMC Corporation, its successors and assigns the full and exclusive right, title and interest in and to said invention and in and to said patent application in the United States of America and its territorial possessions and in any and all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States of America or in any and all said foreign countries and in and to any and all divisions, continuations, renewals, substitutions or reissues and extensions thereof for the full term or terms for which the same may be granted;

Assignors hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

Assignors hereby authorize and request the Patent and Trademark Office officials in the United States of America and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said EMC Corporation as the assignee of Assignors' entire right, title and interest in and to the same for the sole use and behoof of said EMC Corporation, its successors and assigns to the full end of the term for which any of said Letters Patent may be granted as fully and entirely as the same would have been held by Assignors had this assignment and sale not been made;

Further, Assignors agree to communicate to EMC Corporation or its representatives any facts known to Assignors respecting said invention, to testify in any legal proceeding, to sign all lawful papers, to execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said EMC Corporation, to make all rightful oaths and generally to do everything possible to aid said EMC Corporation, its successors and assigns to obtain and enforce proper protection for said invention in the United States of America and in any and all foreign countries without further compensation, but at the expense of EMC Corporation, its successors, assigns or other legal representatives; and

Assignors hereby appoint the Secretary or any other officer of EMC Corporation as Assignors' attorney-in-fact and agent to execute all documents required or appropriate to perfect or enforce all rights assigned under this Agreement and further authorizes Assignors' attorney and attorneys and the attorney and attorneys for EMC Corporation to register this assignment in any and all countries.

IN TESTIMONY WHEREOF William R. Fairchild Douglas E. LeCrone and Daniel A. Murphy have hereunto set their hands and seals this / day of March, 2001, this / day of March, 2001, and this / day of March, 2001. William K Douglas E. LeGrone Daniel A. Murphy Commonwealth of Massachusetts **Middlesex County** Before me personally appeared the above named William R. Fairchild on the date aforesaid, known to me to be the person described herein, who executed the foregoing instrument before me and acknowledged the same to be his free act and deed. (Notarial Seal)

My commission expires:

9-4-2003

Commonwealth of Massachusetts)			
Middlesex County) ss:)			
Before me personally appeared the above named Douglas E. LeCrone on the				
date aforesaid, known to me to be the person described herein, who executed the				
foregoing instrument before me and acknowledged the same to be his free act and				
deed. (Notarial Seal)	Mancy & Buck			
	Notary Public			
My commission expire	es: 9.4.2003			
Commonwealth of Massachusetts) ss:				
Middlesex County				
Before me personally appeared the a	bove named Daniel A. Murphy on the			
date aforesaid, known to me to be the perso	n described herein, who executed the			
foregoing instrument before me and acknow	rledged the same to be his free act and			
deed.	;			
(Notarial Seal)	Manay & Buck)			
	Notary Public			
My commission expire	es: 9-4.2003			

4

RECORDED: 03/23/2001