U.S. PTO 11/807133 05/25/2007

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Zip: 02210-220	
17) 646-8000	Expiration Date
~	b. Deposit Account Number
@woirgreenfield.com	Authorized User Name
Louin Signature	May 25, 2007 Date
J. Gerwin - 57,866 of Person Signing	Total number of pages including cover sheet, attachments, and documents:
	be mailed: ard F. Giunta IFIELD & SACKS, P.C. erve Plaza Avenue oston zip: 02210-22 17) 646-8000 17) 646-8646 @wolfgreenfield.com Signature J. Gerwin - 57,866

E0295.70327US00 1196152.1

REEL: 019412 FRAME: 0340

PATENT/Joint Assignment Attorney Docket No.: E0295.70327US00

ASSIGNMENT

WHEREAS, we, Philippe Armangau, Michael Kilian, and Stephen J. Todd 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 STORING DELETED DATA IN A FILE SYSTEM SNAPSHOT, the specification of which:

[X] is being executed on even date herewith and is about to be filed in the United States Patent Office;

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;

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PATENT REEL: 019412 FRAME: 0341

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: 5/22/07

Inventor's Signature

Print full name of third inventor:

Philippe Armangau

Residence:

51 Seminole Road, Acton, MA 01720

Citizenship:

France

Mailing Address:

51 Seminole Road, Acton, MA 01720

STATE/COMMONWEALTH OF Wassachuselys

COUNTY OF Mischelles :

Sworn to and subscribed before me on this 22 day of Maunder the laws of the United States of America. _ 2007 under the pains and penalties of perjury

My commission expires \underline{V}

HARRIET L. PLACE Notary Public nmonwealth of Massachusetts My Commission Expires May 17, 2013

PATENT/Joint Assignment Attorney Docket No.: E0295.70327US00

$\frac{5/24/07}{\text{Date}}$ Inve	ntor: Michael Kilian	
Add	ress: 25 Candleberry Lane, Harvard, MA 01451	
Citizenship: United States		
STATE/COMMONWEALTH OF Marshachers 45 :		
COUNTY OF Middlenex:		
Sworn to and subscribed before me on this 24 day of May, 2007 under the pains and penalties of perjury under the laws of the United States of America.		
SEAL Houris & Clare Notary Public	HARRIET L. PLACE Notary Public Commonwealth of Massachusetts My Commission Expires	
My commission expires Mag 17 2013	May 17, 2013	
Date: $\frac{5}{31} / \frac{3007}{3007}$	Top Hw Top Signature	
Print full name of first inventor:	Stephen J. Todd	
Residence:	36 Thomas Farm Circle, Shrewsbury, MA 01545	
Citizenship:	USA	
Mailing Address:	36 Thomas Farm Circle, Shrewsbury, MA 01545	
STATE/COMMONWEALTH OF Masshekusetts: COUNTY OF Muselsy: Sworn to and subscribed before me on this 21 day of May, 201) under the pains and penalties of perjury under the laws of the United States of America.		
SEAL Kustuna a white Notary Public My commission expires 8/35/30/1		
My commission expires $8/35/3011$		
KRISTINA A. WHITE		

Notary Public

Commonwealth of Massachusetts

My:Commission Expires

August 25, 2011

RECORDED: 05/25/2007

PATENT

REEL: 019412 FRAME: 0343