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DEPARTMENT OF COMMERCE

FORM PTO-1595 U.S. (Rev. 8-93) 1 029 OMB No. 0651-0011 (exp. 4/94)	27129 DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Commissioner for Patents : Please record	the attached original documents or copy thereof.
Name of conveying party(les): Stephen J. Todd, Michael Killan, Tom Teugels, Frank Matthijs and Kim Marivoet	2. Name and address of receiving party(ies) Name: EMC Corporation
Additional name(s) of conveying party(les) attached? [] Yes [X] No	Internal Address:
Nature of conveyance:	Street Address: 176 South Street
[X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other	Hopkinton, MA 01748 Additional name(s) & addresses(es) attached? [] Yes [X] No
Execution Date: January 4, 2005; January 3, 2005; and December 27, 2004	
4. Application number(s) or patent number(s):	
If this document is being filed together with a new applic 2005 A. Patent Application No.(s)	ation, the execution date of the application is January 4, B. Patent No.(s)
Additional numbers at	tached? [] Yes [X] No
 Name and address of party to whom correspondence Concerning document should be mailed: 	6. Total number of applications and patents involved: [1] 7. Total fee (37 CFR 3.41) \$40.00
Name: Richard F. Giunta Address: Wolf, Greenfield & Sacks, P.C.	[X] Enclosed
600 Atlantic Avenue Boston, MA 02210-2206	[] Authorized to be charged to deposit account
4/2005 MBELETEI 00000004 11034732	The Commissioner is authorized to charge any deficiencies in the enclosed payment to:
C:8021 40.00 DP	8. Deposit Account No: 23/2825
DO NOT USE	THIS SPACE
9. Statement and signature To the best of my knowledge and belief, the foregoing i true copy of the original document. [nformation is true and correct and any attached copy is a
Richard F. Giunta	//2/05 Date
Name of Person Signing / Signat	nte Date
Total number of pages including cover	sheet, attachments, and document: [13]

Mail documents to be recorded with required cover sheet information to (modify as appropriate):

Commissioner of Patents

PO Box 1450, Alexandria, VA 22313-1450

PATENT

ASSIGNMENT

WHEREAS, we, Stephen J. Todd, Michael Kilian, Tom Teugels, Frank Matthijs, and Kim Marivoet 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 METHODS AND APPARATUS FOR MANAGING DELETION OF DATA, 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;

851663.1

PATENT REEL: 016555 FRAME: 0081

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:	
	Inventor's 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
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employee identification card; [] drive	to be the person whose name is subscribed to the ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires / /

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Date:	
- · · · · · · · · · · · · · · · · · · ·	Inventor's Signature
Print full name of second inventor:	Michael Kilian
Residence:	25 Candleberry Lane, Harvard, MA 01451
Citizenship:	USA
Mailing Address:	25 Candleberry Lane, Harvard, MA 01451
STATE/COMMONWEALTH OF COUNTY OF	
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	Notary Public
	Print Name:
	My Commission expires / /

Date: 4/1/2005	AFF TO THE PARTY OF THE PARTY O
	Inventor's Signature
Print full name of third inventor:	Tom Teugels
Residence:	Rozenlaan 26, 2900 Schoten, Belgium
Citizenship:	Belgium
Mailing Address:	Rozenlaan 26, 2900 Schoten, Belgium
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	Notary Public
	Print Name:
	My Commission expires $\frac{37}{72} / \frac{2025}{2025}$



Date: 311105	(Randthy Jo
•	Inventor's Signature
Print full name of third inventor:	Frank Matth
Residence:	Fresiastraat 29, 9280 Lebbeke, Belgium
Citizenship:	Belgium
Mailing Address:	Fresiastraat 29, 9280 Lebbeke, Belgium
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employee identification card; driver	, 2005, then personally appeared before me the through satisfactory evidence of identification [\scales] 's license; [] (other) be the person whose name is subscribed to the d that he/she executed the same as his/her free act and
	Ja Vorroth
	Notary Public
	Print Name:
	My Commission expires 37 / 72/ 2025
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	GENCO SERVICE OF THE PROPERTY

Date: 27/12/2004	
· ·	Inventor's Signature
Print full name of third inventor:	Kim Marivoet
Residence:	Pakeshof 12, 3360 Lovenjoel, Belgium
Citizenship:	Belgium
Mailing Address:	Pakeshof 12, 3360 Lovenjoel, Belgium
STATE/COMMONWEALTH OF COUNTY OF	Belgium
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ASSIGNMENT

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[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: 016555 FRAME: 0087

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: <u>January 4, 2005</u>	_ Same 600
' '	Inventor's 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
employee identification card; [1] d	to be the person whose name is subscribed to the
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	Notary Public
	Print Name:Noney & Townley
	My Commission expires Notary Public Commission expires My Commission Expires July 14, 2011

Date: 4- Jon-2003	miles XI
	Inventor's Signature
Print full name of second inventor:	Michael Kilian
Residence:	25 Candleberry Lane, Harvard, MA 01451
Citizenship:	USA
Mailing Address:	25 Candleberry Lane, Harvard, MA 01451
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	Notary Public
	Print Name: Name: Namey & Lorgley
	My Commission expire commonwealth of Massachusetts My Commission Expires July 14, 2011

Date:	
*	Inventor's Signature
Print full name of third inventor:	Tom Teugels
Residence:	Rozenlaan 26, 2900 Schoten, Belgium
Citizenship:	Belgium
Mailing Address:	Rozenlaan 26, 2900 Schoten, Belgium
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	ed that he/she executed the same as his/her free act and
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of third inventor:	Frank Matthijs
Residence:	Fresiastraat 29, 9280 Lebbeke, Belgium
Citizenship:	Belgium
Mailing Address:	Fresiastraat 29, 9280 Lebbeke, Belgium
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	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of third inventor:	Kim Marivoet
Residence:	Pakeshof 12, 3360 Lovenjoel, Belgium
Citizenship:	Belgium
Mailing Address:	Pakeshof 12, 3360 Lovenjoel, Belgium
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