101669065 ATION FORM COVER SHEET FORM PTO-1595 U.S. Department of Commerce (Rev. 6-93) PATENTS ONLY **Patent and Trademark Office** OMB No. 0651-0011 (exp. 4/94) To the Honorable Commissioner for Patents. Please record the attached original document or copy thereof. Name of conveying party(ies): MKD 03-20-01 2. Name and address of receiving party(ies): Uday K. Gupta Name: EMC CORPORATION Additional name(s) of conveying party(ies) attached? Yes No Street Address: 35 Parkwood Drive 3. Nature of conveyance: X Assignment City: Hopkinton State: MA Zip: 01748 Security Agreement Change of Name Additional name(s) & address(es) attached? Yes No Other Execution Date: 03/19/2001 4. Application number(s) or registration number(s): Unknown If this document is being filed together with a new application, the execution date of the application is: 03/19/200109812740 A. Patent Application No.(s): Unknown Unknown Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: document should be mailed: 7. Total fee (37 C.F.R. 3.41)------\$ 40.00 Name: Richard C. Auchterlonie, Esq. Howrey Simon Arnold & White, LLP Enclosed Authorized to be charged to deposit account 750 Bering Drive 8. Deposit account number: 05-0889/EMC-00-173 zip: 77057-2198 City: Houston State: Texas (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. arland Quehterlein 3/20/01 Richard C. Auchterlonie Name of Person Signing, Reg. No. 30,607 Total number of pages including cover sheet, attachments and documents

CERTIFICATE OF EXPRESS MAIL

NUMBER EL5 21272966 US DATE OF DEPOSIT 3/20/01

I hereby certify that this paper or fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231.

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PATENT

REEL: 011640 FRAME: 0831

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, does hereby:

SELL, ASSIGN AND TRANSFER to EMC CORPORATION (the "Assignee"), having a place of business at 35 Parkwood Drive, Hopkinton, MA 01748, his entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled "BUILDING A META FILE SYSTEM FROM FILE SYSTEM CELLS" such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

PATENT REEL: 011640 FRAME: 0832 TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Name: Uday K. Gupta

Date: 3/19/2001

STATE OF

Signature:

COUNTY OF Middlesex

BEFORE ME, the undersigned authority, on this ____ day of _____, 2001, personally appeared UDAY K. GUPTA, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

HALLANDIAM WALECKI, Notary Public My Commission Expires July 82, 2002

HOWREY SIMON ARNOLD & WHITE, LLP

750 Bering Drive Houston, Texas 77057-2198 1299 Pennsylvania Avenue, N.W. Washington, DC 20004

PATENT REEL: 011640 FRAME: 0833