COVER SHEET

ty. Docket No. FIS920020117US1

To the Honorable Commiss

102342564

Please record the attached original documents or

copy thereof. 1. Name of Conveying party(ies): Gary B. Bronner, Ramachandra Divakaruni, Byeong Kim, Jack A. Mandelman 2. Name & address of receiving party(ies) Nature of Conveyance: Assignment Name: International Business Machines Corporation Street Execution Date: 12/16/02, 12/16/02, Address: New Orchard Road 01/09/03, 12/16/02. City: Armonk State: New York ZIP: 10504 4. Application number(s) or patent number(s): Title of Application: DRAM HAVING OFFSET VERTICAL TRANSISTORS AND METHOD If this document is being filed together with a new application, the execution date of the application is: 12/16/02, 12/16/02, 01/09/03, 12/16/02. Patent Application No(s). B. Patent No(s) Docket No. Serial No. Additional numbers attached? ___Yes _X_No 5. Name and address of party to whom 6. Total number of applications and correspondence concerning document patents involved: __1_ should be mailed: Name: Daryl K. Neff 7. Total fee (37 CFR 3.41): \$40.00 _ Enclosed Street Address: X Authorized to be charged to IBM Corporation deposit account Intellectual Property Law Dept. Dept. 18G/Bldg. 300-482 Deposit A/C no.: 09-0458 (FI-036) 2070 Route 52 (Attach duplicate copy of this page Hopewell Junction, NY 12533-6531 if paying by deposit account) 01/21/2003 LMUELLER 00000023 890458 10342419 DO NOT USE THIS SPACE 01 FC:8021 40.00 CH 9. Statement of 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. Daryl K. Neff, Reg. No. 38,253 Name of Person Signing Telephone No. (914) 894-3664 Total number of pages, including cover sheet, attachments, and document 5_ Express Mail No. EU702259401US I hereby certify that this correspondence is being deposited with the United States Postal Service as

Express Mail in an envelope addressed to: UNITED STATES PATENT & TRADEMARK OFFICE, PO BOX 2327, ARLINGTON, VA 22202. Applicant and/or Attorney requests the date of deposit as the filing date. Garning-Mars
KAREN CING-MARS 1/14/03

<u>January 14, 2003</u> DATE OF DEPOSIT

SIGNATURE AND DATE

ASSIGNMENT

WHEREAS, we

(1) Gary B. Bronner of Stormville

County of Dutchess State of New York

and

(2) Ramachandra Divakaruni of Ossining

County of Westchester State of New York

and

(3) Byeong Kim of LaGrangeville County of Dutchess State of New York

and

(4) Jack A. Mandelman of Flat Rock

County of Henderson State of North Carolina

have invented certain improvements in

DRAM HAVING OFFSET VERTICAL TRANSISTORS AND METHOD

and executed a United States patent application therefor on: (dates that Inventors signed the declaration)

(1) 0ec/b, 2002 and (2) 2ec./b, 2002 and (3) $1/9/2m^2$, 2002 and

(4) _____,2002.

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire, right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and the invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

PATENT of 2 REEL: 013665 FRAME: 0095

Signed	2
(1) at East Fishkill, NY on <u>Declo</u> ,2002, and	Gary B. Bronner
(2) at East Fishkill, NY on <u>beclb</u> ,2002,	Ramachandra Divakaruni
(3) at East Fishkill, NY on	Byeong Kim

Jack A. Mandelman

(4) at Flat Rock, NC

on _____,2002,

ASSIGNMENT

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County of Dutchess State of New York

and

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County of Westchester State of New York

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PATENT_{ge 1 of 2} REEL: 013665 FRAME: 0097

Signed	
(1) at East Fishkill, NY on,2002, and	Gary B. Bronner
(2) at East Fishkill, NY on,2002,	Ramachandra Divakaruni
(3) at East Fishkill, NY on, 2002,	Byeong Kim
(4) at Flat Rock, NC	Jack Ci. Mundelmen

RECORDED: 01/14/2003

PATIENT 2 of 2 **REEL: 013665 FRAME: 0098**