08-11-1999

| Гo | the | Honorable | Commissioner | of | Pate |
|-----|------|-----------|--------------|----|------|
| cor | y ti | hereof. | | | |

| đ | the | attached | original | documents | or |
|---|-----|----------|----------|-----------|----|
| | | | | | |

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1. Name of Conveying party(ies): Toshiaki Kirihata, Daniel Storaska, Chandrasekhar Narayan, William Tonti, Claude Bertin, Nick van Heel

Nature of Conveyance: Assignment

Execution Date: 07/20/99, 07/20/99, 07/20/99, 07/27/99, 07/27/99, 07/26/99

2. Name & address of receiving party(ies)

Name: International Business Machines Corporation

Street

Address:

New Orchard Road

City: Armonk State: New York ZIP: 10504

4. Application number(s) or patent number(s):

Title of Application: PARTIALLY NON-VOLATILE DYNAMIC RANDOM ACCESS MEMORY If this document is being filed together with a new application, the execution date of the application is: 07/20/99, 07/20/99, 07/20/99, 07/27/99, 07/27/99, 07/27/99, 07/26/99

Patent Application No(s). Docket No. FI9-99-152 Serial No.

B. Patent No(s) 1

Additional numbers attached?

Name and address of party to whom correspondence concerning document should be mailed:

Name: H. Daniel Schnurmann

Street Address:

IBM Corporation Intellectual Property Law Dept. Dept. 18G/Bldg. 300-482 1580 Route 52 Hopewell Junction, NY 12533-6531 Total number of applications and patents involved:

Total fee (37 CFR 3.41): Enclosed X Authorized to be charged to deposit account

Deposit A/C no.: 09-0458 (FI-358) (Attach duplicate copy of this page if paying by deposit account)

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9. Statement of signature:

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H. Daniel Schnurmann, Reg. No.35,791

Telephone No. (914) 894-2481

Total number of pages, including cover sheet, attachments, and document _5_

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Name of Person Signing

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231. Applicant and/or Attorney requests the date of deposit

as the filing date. July 30, 1999

DATE OF DEPOSIT

RobinAnn Zeno

SIGNATURE AND DATE

Docket No. FI9-99-152 Page 1

ASSIGNMENT

WHEREAS, I

(1)

Toshiaki Kirihata

| County of Dutchess | State of New York |
|---------------------------|----------------------|
| and | |
| (2) Daniel Storaska | of Wappingers |
| County of Dutchess | State of New York |
| and | |
| (3) Chandrasekhar Narayan | of Hopewell Junction |
| County of Dutchess | State of New York |
| and | |
| (4) William Tonti | of Essex Junction |
| County of Chittenden | State of Vermont |
| and | |
| (5) Claude Bertin | of S. Burlington |
| County of Chittenden | State of Vermont |

County of Chittenden and
(6) Nick van Heel

County of Chittenden

of Burlington

of Poughkeepsie

State of Vermont

have invented certain improvements in

Partially Non-Volatile Dynamic Random Access Memory

and executed a United States patent application therefor on:

(dates that Inventors signed the declaration)

| (1) | 7/20 | _,1999, (2)_ | 7/20 | ,1999, |
|-----|-------|--------------|------|--------|
| (3) | 7/201 | ,1999, (4) | | ,1999, |
| (5) | | ,1999, (6) _ | | ,1999. |

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 acknow-ledged, 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

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.

| Signed | | |
|-----------------------|----------|-----------------------|
| (1) at East Fishkill | | Jahl Ht |
| on | 1000 | Toshiaki Kirihata |
| (2) at East Fishkill | , 1999, | od with |
| | | Daniel Storaska |
| on $\frac{7/20}{}$ | _, 1999, | |
| (3) at East Fishkill | | Chardrasel 2004 |
| on $\frac{7/20}{}$ | _, 1999, | Chandrasekhar Narayan |
| (4) at Essex Junction | | William Tonti |
| on | _, 1999, | vviiidii Tonu |
| (5) at Essex Junction | | Claude Bertin |
| on | _, 1999, | Oldude Bertill |
| (6) at Essex Junction | | Nick van Heel |
| on | , 1999. | |

Docket No. Fl9-99-152

ASSIGNMENT

WHEREAS, I

(1) **Toshiaki Kirihata** of Poughkeepsie County of Dutchess State of New York

and

(2) **Daniel Storaska** of Wappingers County of Dutchess State of New York

and

(3) **Chandrasekhar Narayan** of Hopewell Junction County of Dutchess State of New York

and

(4) **William Tonti** of Essex Junction County of Chittenden State of Vermont

and

(5) Claude Bertin of S. Burlington County of Chittenden State of Vermont

and

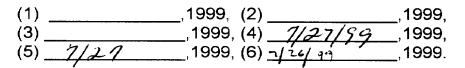
(6) **Nick van Heel** of Burlington County of Chittenden State of **Vermont**

have invented certain improvements in

Partially Non-Volatile Dynamic Random Access Memory

and executed a United States patent application therefor on:

(dates that Inventors signed the declaration)



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

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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.

| Signed | | |
|-----------------------|---------|-----------------------------|
| (1) at East Fishkill | | T 11-11-17-18-4- |
| on | , 1999, | Toshiaki Kirihata |
| (2) at East Fishkill | | |
| on, | 1999, | Daniel Storaska |
| (3) at East Fishkill | | Oh and dan and dan Managara |
| on, | 1999, | Chandrasekhar Narayan |
| (4) at Essex Junction | | _ Curi Tous |
| on $\frac{7/27}{}$ | 1999, | William Tonti |
| (5) at Essex Junction | | Sloude Partie |
| on 27 July, | 1999, | Claude Bertin |
| (6) at Essex Junction | | not mell |
| Λ. | | Nick van Heel |