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Docket No.: SEC.1649

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| Tab settings → → → ▼   | ▼ 1032                            | 8274 <sup>2</sup> <b>▼ ▼</b>                                  | ▼           |
|--|-----------------------------------|---|-------------|
| To the Director of the Unit  | ed States Patent and Trademark (  | Office: Please record the attached original documents or copy | y thereof.  |
| 1. Name of conveying party(is<br>Jin-Yub LEE   | es):                              | 2. Name and address of receiving party(ies):                  | . PTO<br>51 |
|  |                                   | Name: Samsung Electronics Co., Ltd.                           | 2.5<br>2.1  |
|  |                                   | Address: 416, Maetan-dong, Yeongtong-gu,                      | 1/49        |
| Additional names(s) of conveying p   | party(ies) Yes X No               | Suwon-si,   | 112         |
| 3. Nature of conveyance:   |                                   |   |             |
| ☑ Assignment   | ☐ Merger                          |   |             |
| ☐ Security Agreement   | ☐ Change of Name                  | City: Gyeonggi-do State/Prov.:                                |             |
| ☐ Other  |                                   | Country: Republic of Korea ZIP:                               |             |
| Execution Date: July 11, 200   | 06                                | Additional name(s) & address(es)                              | ì No        |
| 4. Application number(s) or pa   | atent numbers(s):                 |   |             |
|  |                                   | n, the execution date of the application is: July 11, 20      | 06          |
| _  | _ ,,                              | · · · · · · · · · · · · · · · · · · ·                         |             |
| Patent Application No.   | Filing date                       | B. Patent No.(s)  |             |
| NEW  | July 25, 2006                     |   |             |
| /27/2006 DBYRNE 00000135 5002<br>FC:8021 40.00 DA  | 238 11492151 Additional number    | s □ Yes ⊠ No  |             |
| 5. Name and address of party concerning document shou  | •                                 | 6. Total number of applications and patents involved          | j: 1        |
| Name: B. Y. Mathis   |                                   | 7. Total fee (37 CFR 3.41):\$ 40.00                           |             |
| Registration No. 44,907  |                                   | ☐ Enclosed - Any excess or insufficiency should               | d be        |
| Address: Volentine France  | os & Whitt, P.L.L.C.              | credited or debited to deposit account                        |             |
| 11951 Freedom Drive, Suite   |                                   | Authorized to be charged to deposit account                   |             |
|  |                                   | 8. Deposit account number:                                    |             |
| City: Reston   | State/Prov.: VA                   | 50-0238   |             |
| Country: U.S.A.  | ZIP: 20190                        | (Attach duplicate copy of this page if paying by deposit acc  | ount)       |
|  | DO N                              | IOT USE THIS SPACE  |             |
| <ol> <li>Statement and signature.</li> <li>To the best of my knowled,<br/>of the original document.</li> </ol> | ge and belief, the foregoing info | ormation is true and correct and any attached copy is a       | true copy   |
| B. Y. Mathis   |                                   | July 25, 200  | 06          |
| Name of Person S   |                                   | Signature Date  |             |

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

## **ASSIGNMENT**

| nsert                          | consideration paid to each of the undersigned   |
|--------------------------------|---|
| Name(s) of nventor(s)          | 1. Jin-Yub LEE 7.   |
| aventor (3)                    | 2 8   |
|                                | 3 9   |
|                                | 4 10  |
|                                | 5 11  |
|                                | 612<br>the undersigned hereby sell(s) and assign(s) to  |
| nsert                          | the undersigned hereby sell(s) and assign(s) to   |
| ame(s) of                      |   |
| ssignee(s) &                   | SAMSUNG ELECTRONICS CO., LTD.   |
| • • • • •                      | 416, Maetan-dong, Yeongtong-gu,   |
| ddress(es)                     | of Suwon-si, Gyeonggi-do, Republic of Korea   |
| itle of<br>nvention<br>Pate of | States as defined in 35 USC 100, in the invention known as  FLASH MEMORY DEVICE CAPABLE OF MULTI-BIT DATA AND  SINGLE-BIT DATA  for which an application for patent in the United States of America has been executed by  |
| ~ ~                            | the undersigned on  |
| Signing of<br>Application      | the undersigned on  |
| ~ ~                            | The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.  |
| ~ ~                            | The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may   |
| ~ ~                            | The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.  The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuing, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining |

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**REEL: 018128 FRAME: 0104** 

The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

| Date | 11th Jul06 | Signature of Inventor | Jin-Yub Lee |
|------|------------|-----------------------|-------------|
| Date |            | Signature of Inventor |             |
| Date |            | Signature of Inventor |             |
| Date |            | Signature of Inventor |             |
| Date |            | Signature of Inventor |             |
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| Date |            | Signature of Inventor |             |
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| Date |            | Signature of Inventor |             |

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| OLENTINE .  | FRANCOS & WHIT  |                              | ATTORNEY DOCKET NO. SEC.1649  |
|-------------|-----------------|------------------------------|---|
|             | witnessed by at | t least two witnesses who si | mended that the execution by the Inventor(s) be gn here. However, the current practice of the U.S. in Assignment even it has not been witnessed.) |
|             | Witnes          | S                            |   |
|             | Witnes          | SS                           |   |
|             |                 |                              |   |
| •••••       |                 |                              | ••••••  |
| Applicant F | Reference No    | ID14601-US                   | _   |
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