PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Doo-Hyung WOO | 12/26/2008 |
| Kwang-Sub SHIN | 12/26/2008 |
| Young-II KIM | 12/26/2008 |
| Ji-Hye EOM | 12/26/2008 |

RECEIVING PARTY DATA

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| Street Address: | 416 Maetan-dong, Yeongtong-gu, Gyeonggi-do | |
| City: | Suwon-si | |
| State/Country: | KOREA, REPUBLIC OF | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12344334 |

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| ATTORNEY DOCKET NUMBER: | P2584US00 |
|-------------------------|-----------|
| | |

NAME OF SUBMITTER: Hae-Chan Park

Total Attachments: 4

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Attorney's Docket No.: P2584US00

ASSIGNMENT

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in

Samsung Electronics Co., Ltd. herein further referred to as ("Assignee").

Now, for valuable consideration by Assignee to Assignor, the receipt of which is hereby acknowledged, and for other good and valuable consideration, Assignee and Assignor hereby agree as follows:

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

Assignor hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary

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or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Assignor has hereunto set hand and seal.

| First Inventor's Name: | Doo-Hyung WOO |
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| First Inventor's Signature: | |
| Date: | |
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| Second Inventor's Signature: | Kwang-sub Shir |
| Date: | Dec. 26, 2008 |
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| Third Inventors' Signature: | Young-il kim |
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Ji Mye Son

Date:

Dec. 26, 2008

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or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Assignor has hereunto set hand and seal.

| | - |
|------------------------------|--|
| First Inventor's Name: | Doo-Hyung WOO |
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