PATENT ASSIGNMENT

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Yong Suk Kim | 01/26/2012 |
| Young Ghyu Ahn | 01/26/2012 |
| Young Seuck Yoo | 01/26/2012 |
| Jeong Bok Kwak | 01/25/2012 |
| Sang Moon Lee | 01/26/2012 |
| Kang Heon Hur | 01/26/2012 |
| Sung Kwon Wi | 01/26/2012 |

RECEIVING PARTY DATA

| Name: | SAMSUNG ELECTRO-MECHANICS CO., LTD. | |
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| City: | Gyunggi-do | |
| State/Country: | KOREA, REPUBLIC OF | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13420538 |

CORRESPONDENCE DATA

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009237.P026 ATTORNEY DOCKET NUMBER:

PATENT

REEL: 027873 FRAME: 0058

| NAME OF SUBMITTER: | Eric S. Hyman |
|--|---------------|
| Total Attachments: 3 source=9237p026_Assignment_031412#page1.tif source=9237p026_Assignment_031412#page2.tif source=9237p026_Assignment_031412#page3.tif | |

PATENT REEL: 027873 FRAME: 0059

| ASSIGNMENT OF PATENT APPLICATION | Attorney Docket No.: 009237. Po26 | | | |
|---|---|--|--|--|
| For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, | | | | |
| I/we, the undersigned, | | | | |
| 1) KIM, Yong Suk 2) AHN, Young Ghyu 3) YOO, Young | Seuck 4) KWAK, Jeong Bok 5) LEE, | | | |
| Sang Moon 6) HUR, Kang Heon 7) WI, Sung Kwon | - | | | |
| SAMSUNG ELECTRO-MECHANICS CO., LTD. a | | | | |
| of | ote) | | | |
| | etc.) | | | |
| having a principal place of business at | | | | |
| 314, Maetan3-dong, Yeongtong-gu, Suwon-si, Gyunggi-do, | Republic of KOREA, | | | |
| ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled | | | | |
| FILTER FOR REMOVING NOISE | | | | |
| said patent application also identified as follows (when know | /n): | | | |
| [I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.] | | | | |
| United States Patent Application Number 13/420,538 | filed_March 14, 2012_, | | | |
| and in and to said application (provisional or non-provisional provisional applications, utility applications, design application applications, continued prosecution applications, continuation applications, renewal applications, reissue applications, reex patent applications that have been or shall be filed in the Unitary of said inventions or improvements; and in and to all origonally foreign countries on said inventions or improvements; and from the filing of said United States application; agree that said Assignee may apply for and receive a patent improvements in its own name; and that, when requested, with said Assignee, its successors, assigns, and legal representation applications, continued prosecution applications, design application applications, continued prosecution applications, continuation applications, renewal applications, reissue applications, reexpatent applications on any and all said inventions or improve assignments, powers of attorney, and other papers; communications, and representatives all facts known to the undersign | ins, divisional applications, continuation n-in-part applications, substitute saminations, extensions, and all other ited States and all foreign countries on ginal patents, reissued patents, reshall be issued in the United States and it in and to all rights of priority resulting or patents for said inventions or ithout charge to, but at the expense of, tives, to carry out in good faith the intent e all provisional applications, nonnes, divisional applications, continuation in-in-part applications, substitute aminations, extensions, and all other ments; execute all rightful oaths, nicate to said Assignee, its successors, | | | |
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Rev. 1/08/2010

improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

January, 26, 2012 Mayorla Signature

KIM, Yong Suk
Printed/Typed Name

Jan 26, 20 12 Amar

AHN, Young Ghyu
Printed/Typed Name

January 26, 20 12
Date
Signature

YOO, Young Seuck
Printed/Typed Name

James 20/2 June.

KWAK, Jeong Bok

Printed/Typed Name

| Jan 26, 20/2 | 1 dr 2 | |
|------------------------|---|--|
| Date Date | Signature LEE, Sang Moon Printed/Typed Name | |
| | Signature HUR, Kang Heon Printed/Typed Name | |
| Jan. 26, 20 12 Date | WI, Sung Kwon | |
| | Printed/Typed Name | |
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