503590915 12/01/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3637545

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| KANG-WOONG KO | 10/26/2015 |
| SUNG-YOON RYU | 11/04/2015 |
| YOUNG-HOON SOHN | 11/04/2015 |
| GIL-WOO SONG | 10/26/2015 |
| TAE-HEUNG AHN | 10/26/2015 |
| HYOUNG-JO JEON | 10/26/2015 |
| SANG-KYEONG HAN | 10/26/2015 |
| MASAHIRO HORIE | 10/26/2015 |
| WOO-SEOK KO | 11/30/2015 |
| YU-SIN YANG | 11/04/2015 |
| SANG-KIL LEE | 11/04/2015 |
| BYEONG-HWAN JEON | 10/26/2015 |

RECEIVING PARTY DATA

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| Internal Address: | YEONGTONG-GU |
| City: | SUWON-SI, GYEONGGI-DO |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 443-742 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14955635 |

CORRESPONDENCE DATA

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PATENT

503590915 REEL: 037179 FRAME: 0803

| Address Line 4: RALEIGH, NORTH CAROLINA 27627 | | | | |
|---|--|--|--|--|
| ATTORNEY DOCKET NUMBER: | 5649-4270 | | | |
| NAME OF SUBMITTER: | CAREY GREGORY | | | |
| SIGNATURE: | /cbg/ | | | |
| DATE SIGNED: | 12/01/2015 | | | |
| | This document serves as an Oath/Declaration (37 CFR 1.63). | | | |
| Total Attachments: 7 | | | | |
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| source=5649-4270_declaration#page2 | 2.tif | | | |
| source=5649-4270_declaration#page3 | 3.tif | | | |
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> PATENT REEL: 037179 FRAME: 0804

COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM¹

| The und | ersigned acknowledges that this document is being used both as an assignment of |
|----------------------|---|
| the inve | ntion and as the declaration (37 CFR 1.63) for a Utility or Design Application. |
| WHERE | AS, the undersigned, hereinafter referred to collectively as Assignor, has invented: |
| Title: | Surface Inspecting Method |
| for whic | h Assignor is about to make or has made United States or International application |
| for pate | nt. |
| WHERE | AS, as a below named inventor(s), I/(we) hereby declare that: |
| | I. Declaration |
| | The attached U.S. non-provisional patent application, or |
| | U.S. non provisional patent application number. , filed on, filed |
| | PCT international patent application number, filed on |
| The abo | ve-identified application was made or authorized to be made by me (us). |
| I (we) b | elieve that I am (we are) the original inventor (original joint inventors) of a claimed in the above-identified application. |
| | ereby acknowledge that any willful false statement made in this declaration is ble under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or |
| ¹ This fo | m requires the use of an Application Data Sheet. |
| SEC Ref | No. IN-201408-003-1-USO Attorney Ref No. 5649-4270 |
| COMBIN | ED DECLARATION (37 CER 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM |

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REEL: 037179 FRAME: 0805

SAMSUNG ELECTRONICS CO., LTD.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

Section II. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to

Samsung Electronics Co., Ltd.

having an address at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Republic of Korea (here inafter designated as the Assignee), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations continuations in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-

| SEC Ref No. N-201408-003-1-USO Attorney Ref No. 5649-4270 | SEC Ref No. | 1 10 201400 002 1 1100 | | - D (A) | | |
|---|-------------|------------------------|--------|------------|-----------|--|
| . I **. | SEC REI NO | IN-201408-003-1-US0 | Attorn | ey Ket No. | 5649-4270 | |

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

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examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

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

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee

The undersigned hereby grant(s) the law firm of Myers Bigel Sibley & Sajovec, P.A. the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Section III. Inventor(s)/Assignor(s) Signature(s)

| LEGAL NAME OF | Family Name | First Given Name | Second Given Name |
|---|--|---------------------------------------|----------------------------------|
| FIRST | | | |
| INVENTOR/ASSIGNOR | KO | Kang-woong | |
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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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| LEGAL NAME OF | Family Name | First Given Name | Second Given Nam |
|-----------------------------|-------------|-----------------------------|--|
| SECOND INVENTOR/ASSIGNOR | RYU | Sung-yoon | |
| | | | |
| | | | |
| SIGNATURE | 2 Alto | DAT | E 11/4 2015 |
| | : | | |
| LEGAL NAME OF | Family Name | First Given Name | Second Given Nam |
| INVENTOR/ASSIGNOR | SOHN | Young-hoon | |
| SIGNATURE | Ben't | DATI | E 11-04,20/5 |
| LEGAL NAME OF | Family Name | First Given Name | Second Given Name |
| ļ | | a sist diven Name | The state of the s |
| FOURTH | SONG | First Given Name Gil-woo | |
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| FOURTH | SONG | | |
| FOURTH NVENTOR/ASSIGNOR | SONG | Gil-woo | |

ТРАНЕНИЯ:REEL: 037179 FRAME: 0808

| 1 | Family Name | First Given Name | Second Given Name |
|--|--------------------|------------------------------|-------------------|
| FIFTH | 11111 | | |
| INVENTOR/ASSIGNOR | AHN | Tae-heung | |
| SIGNATURE _ | | DAT. | E Ook, 26.2015 |
| LEGAL NAME OF | Family Name | First Given Name | Second Given Name |
| SIXTH | | | Second Given Name |
| INVENTOR/ASSIGNOR | JEON - WY | Hyoung-jo | |
| SIGNATURE | | | |
| LEGAL NAME OF | Family Name | Eirst Given Name | Second Given Name |
| LEGAL NAME OF SEVENTH NVENTOR/ASSIGNOR | Family Name HAN | First Given Name Sang-kyeong | Second Given Name |
| SEVENTH NVENTOR/ASSIGNOR | HAN Han Sang kyeo | Sang-kyeong | |

Page **5** of **7**

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| LEGAL NAME OF | Family Name | First Given Name | Second Given Name |
|---------------------------------------|------------------|----------------------------|--|
| EIGHTH INVENTOR/ASSIGNOR | HORIE | Masahiro | Training and the state of the s |
| SIGNATURE | mahir Hoze | DATE. | Oct. 26.2015 |
| LEGAL NAME OF | Family Name | First Given Name | Second Given Name |
| NINETH INVENTOR/ASSIGNOR | KO | Woo-seak | er e |
| SIGNATURE | | DAT | E 2015/11/30 |
| LEGAL NAME OF TENTH INVENTOR/ASSIGNOR | Family Name YANG | First Given Name Yu-sin | Second Given Name |
| SIGNATURE | Jang Cusin | DA | TE 2015/11/02/ |
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SAMSUNG ELECTRONICS CO., LTD.

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| INVENTOR/ASS | IGNUK | ., k | | | |
| TWELVETI | ĺ | JEON | Byeong-hwa | n | |
| LEGAL NAME | | Family Name | First Given Na | ne | Second Given Name |
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| INVENTOR/ASS | IGNOR | | Jang-Kii | | |
| ELEVENT | | LEE | Sang-kil | | |

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RECORDED: 12/01/2015

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