#### 01/12/2018 504726724

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4773448

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

### **CONVEYING PARTY DATA**

| Name           | Execution Date |
|----------------|----------------|
| DONG HUN LEE   | 01/12/2018     |
| SUNG JIN PARK  | 01/12/2018     |
| HEUM YONG PARK | 01/12/2018     |
| DONG-HYUN LEE  | 01/12/2018     |

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| State/Country:  | KOREA, REPUBLIC OF            |
| Postal Code:    | 16677                         |

### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15057432 |

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| ATTORNEY DOCKET NUMBER: | 2494.1343         |
|-------------------------|-------------------|
| NAME OF SUBMITTER:      | PAUL I. KRAVETZ   |
| SIGNATURE:              | /Paul I. Kravetz/ |
| DATE SIGNED:            | 01/12/2018        |

**Total Attachments: 2** source=46M6892#page1.tif source=46M6892#page2.tif

> **PATENT REEL: 044605 FRAME: 0950** 504726724

# **WORLD WIDE ASSIGNMENT**

24/81 55/62

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration furnished to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

SAMSUNG ELECTRONICS CO., LTD. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677,

| Republic of Korea  |   |   |
|--|---|---|
| (hereinetter, "ASSIGNEE"), the receipt of which is a<br>transfers to ASSIGNEE the entire and exclusive rig<br>(Title of Invention)   | nereby acknowledged, the under<br>hit, title and interest to the inver  | ersigned ASSIGNOR hereby sells, assigns and<br>nlien entitled   |
| OBOT CLEANER   | AND CONTROL M   | ETHOD THEREOF   |
| relating to International Patent Application PCT/  | and/or for which  | t application for Letters Patent of the United<br>s:  |
| (a) executed on ;  | (insert date of execu-  | tion of application, if not concurrent)   |
| (b) filled on March 1, 2016,<br>Serial No. 15/057,432;   | 1201 New York Aver  | ney or palent agant of STAAS & HALSEY LLP.<br>nue, N.W., Suite 700 Washington, D.C. 20005<br>maby authorized to insert in (b) the specified   |
| and to said application and all Letters Patent(s) of I invention and/or on said application and any rights (including inter partits review, post grant review and reexamination application based thereon, for the ful any extensions thereof (collectively, hereinafter, "so The ASSIGNOR agree(s), when request ASSIGNEE, to do all acts which the ASSIGNEE may enforcing protection for said invention in the United and prosecution of said application(s) and the issue division, renewal, substitute, reissue, reviews, suppling any litigation or other legal proceeding which may to executing all pagers, including separate assignmental producing and producing evidence. | of priority, extension, continuet to covered business method revit terms for which the action application (s) and Letters Part by said ASSIGNEE and with a down necessary, desirable of States of America and in any ance of said Letters Patentics), idemental examination, interferely arise or be declared in retails of the covered in retails. | tion, division, renewal, substitute, reissue, review<br>riew), supplemental examination, interference, or<br>aid Letters Patent(s) may be granted and includit<br>atent(s)).<br>nout charge to but at the expense of said<br>or expedient, for securing, maintaining and<br>and all other countries, including in the preparatic<br>and in any rights of priority, extension, continuatie<br>ence, reexamination, or public use proceeding,<br>on to same, such acts to include but not be limited. |
| IN WITNESS WHEREOF, the undersigned inve-<br>(Typed Name & Signature of Inventor(s))   | ntor(s) has (have) allixed his/hi<br>(Date)   | er/their signature(s).<br>(Typed Name & Signature of Witness(es))   |
| " Das  | 2018,01.12  |   |
| 1) Dong Hun LEE 2) Sung Jin PARK   | 2018 .01. 12  |   |
| 3) Houm Yong PARK 4) Dong - Hyum (ee ) Dong Hyun Lee   | 2010 .01. 12  |   |
|  |   |   |

## **WORLD WIDE ASSIGNMENT**

9841116616

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration furnished to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

SAMSUNG ELECTRONICS CO., LTD. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea

**RECORDED: 01/12/2018** 

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled (Title of Invention)

| THE OT INVERTION   |   |  |
|--|---|--|
| OBOT CLEANER   | AND CONTROL M   | ETHOD THEREOF  |
| relating to International Patent Application PCT/  |   | h application for Letters Patent of the United s:  |
| (a) executed on ;  | (insert date of execu-  | tion of application, if not concurrent)  |
| (b) filed on March 1, 2016,<br>Serial No. 15/057,432;  | 1201 New York Aver  | iey or patent agent of STAAS & HALSEY ILP,<br>nue, N.W., Suite 700 Washington, D.C. 20005<br>reby authorized to insert in (b) the specified  |
| and to said application and all Letters Patent(s) of to<br>invention and/or on said application and any rights<br>jincluding inter pertes review, post grant review and<br>reaxamination application based thereon, for the full<br>any extensions thereof (collectively, hereinatter, "sa   | of priority, extension, continuat<br>I covered business method rev<br>Il term or terms for which the sa   | ion, division, renewal, substitute, reissue, review<br>riew), supplemental examination, interference, or<br>aid Letters Patent(s) may be granted and includir  |
| The ASSIGNOR agree(s), when requests ASSIGNEE, to do all acts which the ASSIGNEE may anforcing protection for said invention in the United and prosecution of said application(s) and the issue thirtiston, renewal, substitute, reissue, reviews, suppon any itigation or other legal proceeding which may be executing all papers, including separate assignmobitatining and producing evidence. | ny deem necessary, desirable of<br>States of America and in any a<br>ince of said Letters Patent(s), in<br>lemental examination, interfere<br>y arise or be declared in relatio | or expedient, for securing, maintaining and<br>and all other countries, including in the preparatir<br>and in any rights of priority, extension, continuati<br>ance, reexamination, or public use proceeding, a<br>on to same, such acts to include but not be limite. |
| IN WITNESS WHEREOF, the undersigned inver<br>(Typed Name & Signature of Inventor(s))   | ntor(s) has (have) attixed his/h<br>(Date)  | er/their signature(s).<br>(Typed Name & Signature of Witness(es))  |
| Dong Hun LEE   |   |  |
| () Sung Jin PARK   |   | •••••  |
| 1) PAYK How Yong Houm Yong PARK  | 2010 .01. 12  |  |
| ·)   | ***************************************   |  |
| Dang-Hyun LEE  |   |  |

PATENT REEL: 044605 FRAME: 0952