#### 504605213 10/22/2017

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4651925

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

#### **CONVEYING PARTY DATA**

| Name           | Execution Date |
|----------------|----------------|
| YANG YU        | 02/24/2015     |
| CHANG-EUN CHOI | 02/25/2015     |
| KYUNG HO KIM   | 02/26/2015     |
| WALTER JUN     | 03/16/2015     |
| WONCHURI ZOO   | 03/12/2015     |
| ROBERT BRENNAN | 02/24/2015     |

#### **RECEIVING PARTY DATA**

| Name:           | SAMSUNG ELECTRONICS CO., LTD. |
|-----------------|-------------------------------|
| Street Address: | 129, SAMSUNG-RO, 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: | 15726375 |  |

#### **CORRESPONDENCE DATA**

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 503-419-6425

**Email:** mail@renaissanceiplaw.com

Correspondent Name: RENAISSANCE IP LAW GROUP LLP (SSI)

Address Line 1: 9600 SW OAK STREET, SUITE 560

Address Line 4: PORTLAND, OREGON 97223

| ATTORNEY DOCKET NUMBER: | 1535-126CON  |
|-------------------------|--|
| NAME OF SUBMITTER:      | HOSOON LEE   |
| SIGNATURE:              | /Hosoon Lee/   |
| DATE SIGNED:            | 10/22/2017   |
|                         | This document serves as an Oath/Declaration (37 CFR 1.63). |

PATENT REEL: 044572 FRAME: 0199

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### **Total Attachments: 21** source=1535-126CON\_WB-201405-006-1-US1\_Declaration\_Assignment\_parent#page1.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page2.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page3.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page4.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page5.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page6.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page7.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page8.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page9.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page10.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page11.tif source=1535-126CON WB-201405-006-1-US1\_Declaration\_Assignment\_parent#page12.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page13.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page14.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page15.tif source=1535-126CON\_WB-201405-006-1-US1\_Declaration\_Assignment\_parent#page16.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page17.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page18.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page19.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page20.tif source=1535-126CON WB-201405-006-1-US1 Declaration Assignment parent#page21.tif

# COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM<sup>1</sup>

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application. WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented: MOBILE FLASH STORAGE BOOT PARTITION AND/OR LOGICAL UNIT SHADOWING Title: for which Assignor is about to make or has made United States or International application for patent. WHEREAS, as a below named inventor(s), I/(we) hereby declare that: Section I. Declaration This declaration is directed to: The attached U.S. non-provisional patent application, or M PCT international patent application number \_\_\_\_\_\_, filed on The above-identified application was made or authorized to be made by me (us). I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application. I (we) hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. I hereby state that I have reviewed and understand the contents of the above identified application, including the claims. This form requires the use of an Application Data Sheet.

SEC Ref No. WB-201405-006-1 Attorney Ref No. PATENT26

REEL: 044572 FRAME: 0201

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 (hereinafter 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, reexamination, 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;

SEC Ref No. WB-201405-006-1 Attorney Ref No. PATEN 126

REEL: 044572 FRAME: 0202

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 Renaissance IP Law Group LLP 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 |
|-------------------|----------------------------|------------------|-------------------|
| INVENTOR/ASSIGNOR | YU                         | Yang             |                   |
| SIGNATURE         | Manufacture Company of the | DATE             | Feb 24, 2015      |

| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
|-----------------------------|-------------|------------------|-------------------|
| SECOND<br>INVENTOR/ASSIGNOR | CHOI        | Chang-Eun        |                   |
| SIGNATURE                   |             | DATE             |                   |

| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | PATENTE            |
|-------------|-----------------|------------------|--------------------|
|             |                 | REEL:            | 044572 FRAME: 0203 |

| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
|-----------------------------|-------------|------------------|-------------------|
| THIRD<br>INVENTOR/ASSIGNOR  | KIM         | Kyung Ho         |                   |
| SIGNATURE _                 |             | DATE<br>         |                   |
| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
| FOURTH<br>INVENTOR/ASSIGNOR | JUN         | Walter           |                   |
| SIGNATURE                   |             | DATE             |                   |
| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
| FIFTH INVENTOR/ASSIGNOR     | Z00         | Wonchuri         |                   |
| SIGNATURE                   |             | DATE             |                   |
| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
| SIXTH<br>INVENTOR/ASSIGNOR  | BRENNAN     | Robert           |                   |
| SIGNATURE                   | Ru          | DATE             | 24 FEBLS          |

SEC Ref No. WB-201405-006-1 Attorney Ref No. PATENT26

REEL: 044572 FRAME: 0204

## COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM<sup>1</sup>

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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 <u>129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742,</u> Republic of Korea (hereinafter 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, reexamination, 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;

| SEC Ref No. | W8-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |

REEL: 044572 FRAME: 0206

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.

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

| LEGAL NAME OF              | Family Name | First Given Name | Second Given Name |
|----------------------------|-------------|------------------|-------------------|
| FIRST<br>INVENTOR/ASSIGNOR | YU          | Yang             |                   |
| SIGNATURE                  |             | DATE             |                   |
|                            |             |                  |                   |

| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
|-----------------------------|-------------|------------------|-------------------|
| SECOND<br>INVENTOR/ASSIGNOR | СНОІ        | Chang-Eun        |                   |
| SIGNATURE                   | Maror       | DATE             | 02/25/15          |

| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |

| LEGAL NAME OF THIRD      | Family Name | First Given Name | Second Given Name |
|--------------------------|-------------|------------------|-------------------|
| INVENTOR/ASSIGNOR        | KIM         | Kyung Ho         |                   |
| SIGNATURE                |             | DATE             |                   |
|                          |             |                  |                   |
| LEGAL NAME OF            | Family Name | First Given Name | Second Given Name |
| FOURTH INVENTOR/ASSIGNOR | JUN         | Walter           |                   |
|                          |             | DATE             | 1                 |
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| LEGAL NAME OF            | Family Name | First Given Name | Second Given Name |
| INVENTOR/ASSIGNOR        | <b>ZOO</b>  | Wonchuri         |                   |
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| SIGNATURE                |             | DATE             |                   |
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| LEGAL NAME OF            | Family Name | First Given Name | Second Given Name |
| SIXTH INVENTOR/ASSIGNOR  | BRENNAN     | Robert           |                   |
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WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

| Title:                 | MOBILE FLASH STORAGE BOOT LOGICAL UNIT SHADOWING  |  |  |  |  |  |
|------------------------|---|--|--|--|--|--|
| for which a            | For which Assignor is about to make or has made United States or International application For patent.  |  |  |  |  |  |
| WHEREAS,               | WHEREAS, as a below named inventor(s), I/(we) hereby declare that:  |  |  |  |  |  |
| Section I.             | Declaration   |  |  |  |  |  |
| This declar            | ration is directed to:  |  |  |  |  |  |
| $\boxtimes$            | The attached U.S. non-provisional patent application, or  |  |  |  |  |  |
|                        | U.S. non-provisional patent application number, filed on, or  |  |  |  |  |  |
|                        | PCT international patent application number, filed on   |  |  |  |  |  |
| The above              | -identified application was made or authorized to be made by me (us).   |  |  |  |  |  |
|                        | eve that I am (we are) the original inventor (original joint inventors) of a claimed in the above-identified application.                                     |  |  |  |  |  |
|                        | eby acknowledge that any willful false statement made in this declaration is under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or |  |  |  |  |  |
| I hereby st            | rate that I have reviewed and understand the contents of the above identified   |  |  |  |  |  |
| application            | n, including the claims.  |  |  |  |  |  |
| <sup>1</sup> This form | This form requires the use of an Application Data Sheet.  |  |  |  |  |  |
| SEC Ref No             | . <b>WB-201405-006-1</b> Attorney Ref No. <b>1535-126</b>   |  |  |  |  |  |

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 1 of 4

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#### Samsung Electronics Co., Ltd.

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| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 4

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| LEGAL NAME OF              | Family Name | First Given Name | Second Given Name |
|----------------------------|-------------|------------------|-------------------|
| FIRST<br>INVENTOR/ASSIGNOR | YU          | Yang             |                   |
| SIGNATURE                  |             | DATE             |                   |

| LEGAL NAME OF               | Family Name | First Given Name | Second Given Name |
|-----------------------------|-------------|------------------|-------------------|
| SECOND<br>INVENTOR/ASSIGNOR | СНОІ        | Chang-Eun        |                   |
| SIGNATURE                   |             | DATE             |                   |

| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |

| LEGAL NAME OF<br>THIRD INVENTOR/<br>ASSIGNOR | Family Name                            | First Given Name | Second Given Name |
|--|--|------------------|-------------------|
|  | XIIV                                   | Kyung Ho         |                   |
| signature                                    | ······································ | DATE             |                   |
| LEGAL NAME OF                                | Form 3. Advance                        | Final Class B.   | T                 |
| FOURTH INVENTOR/                             | Family Name                            | First Given Name | Second Given Name |
| ASSIGNOR                                     | IJN                                    | Walter           |                   |
| Signature                                    | <u> </u>                               | DATE             | 2015; 03, 16      |
|  |  |                  |                   |
| LEGAL NAME OF                                | Family Name                            | First Given Name | Second Given Name |
| FIFTH INVENTOR/ L.<br>ASSIGNOR               | 700                                    | Wonchuri         |                   |
| SIGNATURE                                    |  | DATE             |                   |
|  |  |                  |                   |
| LEGAL NAME OF<br>SIXTH INVENTOR/             | Family Name                            | First Given Name | Second Given Name |
| ASSIGNOR                                     | BRENNAN                                | Robert           |                   |
| SIGNATURE                                    |  | DATE             |                   |
|  |  |                  |                   |
| SEC Ref No. WB-                              | 201405-006-1                           | Attorney Ref No. | 1535-126          |

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 4

# COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM<sup>1</sup>

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

| V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | . sirver digitally free character at a fact that                             | to concedivery as Assignor    | , mas mvemeu.                           |
|---|--|-------------------------------|---|
| Title: MOBI                             | LE FLASH STORAGE BOOT PARTITI  | ON AND/OR LOGICAL UNI         | T SHADOWING                             |
|   |  |                               | *************************************** |
| for which Assignatent.                  | gnor is about to make or has made  | United States or Internation  | onal application for                    |
| WHEREAS, as a                           | a below named inventor(s), I/(we) I  | nereby declare that:          |   |
| Section I. Dec                          | laration   |                               |   |
| This declaratio                         | on is directed to:   |                               |   |
| $\boxtimes$                             | The attached U.S. non-provisional  | patent application, or        |   |
|   | U.S. non-provisional patent application , or                                 | ation number                  | , filed on                              |
|   | PCT international patent application   | on number                     | , filed on                              |
| The above-ide                           | ntified application was made or au   | thorized to be made by me     | e (us).                                 |
|   | that I am (we are) the original inver<br>e above-identified application.     | ntor (original joint inventor | rs) of a claimed                        |
|   | acknowledge that any willful false s<br>der 18 U.S.C. 1001 by fine or impris |                               |   |
| <sup>1</sup> This form requi            | ires the use of an Application Data Sheet.                                   |                               |   |
| SEC Ref No.                             | WB-201405-006-1  | Attorney Ref No.              | 1535-126                                |

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

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PATENT

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 (hereinafter 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    |
|---|
| equested for the making and prosecution of any applications of any type for patent, utility |

| EC Ref No. WB-201405-006-1 | Attorney Ref No. | 1535-126 |
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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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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-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 **Renaissance IP Law Group LLP** 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 |
|-------------------|-------------|------------------|-------------------|
| INVENTOR/ASSIGNOR | YU          | Yang             |                   |
| SIGNATURE         |             | DATE             |                   |

| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |
|             |                 |                  |          |

| LEGAL NAME OF               | Family Name  | First Given Name | Second Given Name |
|-----------------------------|--------------|------------------|-------------------|
| SECOND<br>INVENTOR/ASSIGNOR | СНОІ         | Chang-Eun        |                   |
| SIGNATURE                   |              | DATE<br>—        |                   |
|                             |              |                  |                   |
| LEGAL NAME OF THIRD         | Family Name  | First Given Name | Second Given Name |
| INVENTOR/ASSIGNOR           | KIM          | Kyung Ho         |                   |
| SIGNATURE                   |              | DATE<br>—        |                   |
|                             |              |                  |                   |
| LEGAL NAME OF FOURTH        | Family Name  | First Given Name | Second Given Name |
| INVENTOR/ASSIGNOR           | JUN          | Walter           |                   |
| SIGNATURE                   |              | DATE             |                   |
|                             |              |                  |                   |
| SEC Ref No. WB-2            | ስፋ ለስሮ ሴሴድ ለ | Attorney Ref No. | 1535-126          |

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PATENT

| LEGAL NAME OF FIFTH | Family Name | First Given Name | Second Given<br>Name |
|---------------------|-------------|------------------|----------------------|
| INVENTOR/ASSIGNOR   | ZOO         | Wonchuri         |                      |
|                     |             | <u> </u>         | J                    |
|                     | 3 - 1       |                  |                      |
|                     |             |                  |                      |
|                     | f v         | DATE             | 2015.03.12           |

| LEGAL NAME OF     | Family Name | First Given Name | Second Given Name |
|-------------------|-------------|------------------|-------------------|
| INVENTOR/ASSIGNOR | BRENNAN     | Robert           |                   |
| SIGNATURE         |             | DATE             |                   |

| SEC Ref No. | WB-201405-006-1 | Attorney Ref No. | 1535-126 |
|-------------|-----------------|------------------|----------|
|             |                 |                  |          |

**RECORDED: 10/22/2017**