504353565 05/05/2017

# **PATENT ASSIGNMENT COVER SHEET**

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

### **CONVEYING PARTY DATA**

| Name          | Execution Date |
|---------------|----------------|
| TAEWOO LEE    | 05/04/2017     |
| SANGHYUK IM   | 05/04/2017     |
| HIMCHAN CHO   | 05/04/2017     |
| YOUNGHOON KIM | 05/04/2017     |

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| State/Country:  | KOREA, REPUBLIC OF                  |
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### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15524754 |

## CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 302/1686_00    |
|-------------------------|----------------|
| NAME OF SUBMITTER:      | JAY P. BEALE   |
| SIGNATURE:              | /Jay P. Beale/ |
| DATE SIGNED:            | 05/05/2017     |

## **Total Attachments: 4**

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> PATENT REEL: 042253 FRAME: 0633

# COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM $^{\rm I}$

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:

| Title:            | PER<br>BUF           | OVSKITE<br>FER LAY           | LIGHT EMITTING ER AND METHOD F                      | DEVICE CONTAININ<br>OR MANUFACTURIN                | G EXCITON<br>G SAME                       |
|-------------------|----------------------|------------------------------|---|--|---|
| for wh            |                      | signor is ab                 | out to make or has made                             | e United States or Interna                         | itional application for                   |
| WHEI              | REAS,                | as a below                   | named inventor(s), I/(w                             | e) hereby declare that:                            |   |
| Sectio            | n I. D               | eclaration                   |   |  |   |
|                   |                      | ion is direct<br>narked:     | ed to the attached U.S.                             | non-provisional patent ap                          | oplication, unless the                    |
|                   |                      |                              |   | cation number                                      | , filed on                                |
|                   | $\boxtimes$          |                              |   | ion number <u>PCT/KR201</u>                        | <u>5/011964</u> , filed on                |
|                   |                      | as ame                       | ended by the Preliminar                             | ry Amendment attached h                            | ereto.                                    |
|                   |                      | as amo                       | ended by the Preliminar                             | ry Amendment filed on _                            | •   |
| The al            | oove-id              | entified app                 | lication was made or au                             | uthorized to be made by r                          | ne (us).                                  |
| I (we)<br>invent  | believe              | e that I am (<br>he above-io | we are) the original inventified application.       | rentor (original joint inver                       | ntors) of a claimed                       |
| I (we)<br>under   | hereby<br>18 U.S     | acknowled<br>.C. 1001 by     | ge that any willful false<br>fine or imprisonment o | e statement made in this of not more than five (5) | declaration is punishable years, or both. |
| I herel<br>applic | by state<br>ation, i | that I have                  | reviewed and understar<br>e claims.                 | nd the contents of the abo                         | ove identified                            |
| 1 This            | form red             | quires the use               | of an Application Data Shee                         | et.  |   |
| Y.P               | . Lee R              | ef No                        | DP-54087-US   | Attorney Ref No.                                   | 302/1686_00                               |
| С                 | OMBIN                | NED DECLA                    | RATION (37 CFR 1.63)                                | FOR UTILITY PATENT                                 | APPLICATION AND                           |

ASSIGNMENT FORM
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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.

<u>Power of Attorney:</u> I/we hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office practitioners associated with Customer Number 27849.

## 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

# Postech Academy-Industry Foundation

having an address at 77, Cheongam-ro, Nam-gu Pohang-si Gyeongsangbuk-do 37673 Korea

(Collectively "Assignees"), 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-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

| Y.P. Lee Ref No. | DP-54087-US                       | Attorney Ref No.                | 302/1686_00     |
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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 LEE & MORSE, PC 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<br>INVENTOR/ASSIGNOR | LEE         | Taewoo           |                   |
| ,                          |             |                  |                   |
|                            |             |                  | ·                 |
| SIGNATURE 2                | al-wooll    | L DATE           | 2017.05.04        |
|                            |             |                  |                   |

| Y.P. Lee Ref No. | DP-54087-US | Attorney Ref No. | 302/1686_00 |
|------------------|-------------|------------------|-------------|

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| LEGAL NAME OF SECOND | Family Name | First Given Name | Second Given Name |
|----------------------|-------------|------------------|-------------------|
| INVENTOR/ASSIGNOR    | IM          | Sanghyuk         |                   |
| <u> </u>             |             |                  |                   |
| SIGNATURE _          | IW          | _ DATE           | 2017.05.04        |
|                      |             |                  |                   |

| LEGAL NAME OF           | Family Name | First Given Name | Second Given Name |
|-------------------------|-------------|------------------|-------------------|
| THIRD INVENTOR/ASSIGNOR | СНО         | Himchan          |                   |
| <u> </u>                |             |                  |                   |
|                         | 조합찬         |                  | 2017 05 04        |
| SIGNATURE               | 202         | DATE             | 20/7.05.04        |

| LEGAL NAME OF            | Family Name    | First Given Name | Second Given Name |
|--------------------------|----------------|------------------|-------------------|
| FOURTH INVENTOR/ASSIGNOR | KIM            | Younghoon        |                   |
|                          |                |                  |                   |
|                          |                |                  |                   |
| SIGNATURE <u>}</u>       | Oung-Hoon King | _ DATE           | 2017.05.04        |
| •                        |                |                  |                   |

| CONTRACTOR AND |             | A president a service of the contract of the c |             |
|--|-------------|--|-------------|
| Y.P. Lee Ref No.                                   | DP-54087-US | Attomey Ref No.  | 302/1686_00 |

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**RECORDED: 05/05/2017**