# 504486725 08/03/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4533427

| SUBMISSION TYPE:      | CORRECTIVE ASSIGNMENT   |
|-----------------------|---|
| NATURE OF CONVEYANCE: | Corrective Assignment to correct the EXECUTION DATE FOR THE SECOND, THIRD, AND FIFTH INVENTORS previously recorded on Reel 032258 Frame 0726. Assignor(s) hereby confirms the CORRECT EXECUTION DATES AS JANUARY 22, 2014, JANUARY 20, 2014 AND JANUARY 20, 2014. |
|                       |   |

## **CONVEYING PARTY DATA**

| Name           | Execution Date |
|----------------|----------------|
| CHULKI KIM     | 01/23/2014     |
| JAE HUN KIM    | 01/22/2014     |
| BYEONG HO PARK | 01/20/2014     |
| SEOK LEE       | 01/23/2014     |
| SEONG CHAN JUN | 01/20/2014     |
| TAIKJIN LEE    | 01/23/2014     |

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| City:           | SEOUL                                     |
| State/Country:  | KOREA, REPUBLIC OF                        |

## **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 14185419 |

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| ATTORNEY DOCKET NUMBER: | 021069.0101     |
|-------------------------|-----------------|
| NAME OF SUBMITTER:      | JERRICK J. HO   |
| SIGNATURE:              | /Jerrick J. Ho/ |
| DATE SIGNED:            | 08/03/2017      |

PATENT 504486725 REEL: 043420 FRAME: 0878

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PATENT REEL: 043420 FRAME: 0879

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

**EPAS ID: PAT2735323** 

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

#### **CONVEYING PARTY DATA**

| Name           | Execution Date |
|----------------|----------------|
| CHULKI KIM     | 01/23/2014     |
| JAE HUN KIM    | 01/23/2014     |
| BYEONG HO PARK | 01/23/2014     |
| SEOK LEE       | 01/23/2014     |
| SEONG CHAN JUN | 01/23/2014     |
| TAIKJIN LEE    | 01/23/2014     |

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#### PROPERTY NUMBERS Total: 1

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 14185419 |

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REEL: 032258 FRAME: 0726 PATENT

REEL: 043420 FRAME: 0880

502688718

| Signature:   | /George N. Phillips/ |
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| Date:  | 02/20/2014           |
| Total Attachments: 3 source=NewApp_0210690101_CDA_wappnumber#page1.tif source=NewApp_0210690101_CDA_wappnumber#page2.tif source=NewApp_0210690101_CDA_wappnumber#page3.tif |                      |

PATENT REEL: 032258 FRAME: 0727 PATENT

**REEL: 043420 FRAME: 0881** 

# COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

#### **DECLARATION**

| As a below-named inventor, I hereby declare that this declaration is directed to the application attached hereto, o  |
|--|
| to United States Application Number or PCT International Application Number  |
| filed on (if applicable), entitled:  |
| OPTICAL LOGIC GATES AND METHOD FOR GENERATING LOGIC SIGNALS USING DNA BASED NANOSTRUCTURE  |
| The above-identified application was made or authorized to be made by me.  |
| I believe I arm the original inventor or an original joint inventor of a claimed invention in the above-identified application.  |
| i hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both  |
| i have reviewed and understand the contents of the above-identified application, including the claims  |
| I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international flying date of the continuation-in-part application.   |
| ASSIGNMENT   |
| For valuable consideration, I, as a below-named assignor, hereby assign to:  |
| KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY  5, Hwerangho 14-gli, Seongbuk-gu Seoul, 138-791 Republic of Korea   |
| and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title, and interest   |
| throughout the world in the inventions and improvements that are the subject of the application identified in the  |
| above declaration, which is United States Application Number or PCT International Application Number 14/185,419  February 20, 2014   |
| I authorize and request the attorneys appointed in the above-identified application to hereafter complete this Assignment by inserting above the application number and the filing date of the above-identified application when known, and to correct any typographical errors that may be discovered in this Assignment.   |
| This Assignment includes the above-centified application, any and all United States and foreign patents, utility models, and design registrations granted for any of the inventions and improvements that are the subject of the above-identified application, and the right to claim priority based on the filing date of the above-identified application under the international Convention for the Protection of Industrial Property, the Patent Cooperation |

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Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations, like rights of exclusion, and inventors' certificates for any of the inventions and improvements that are the subject of the above-

#### COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

identified application; and I agree for myself and my heirs, legal representatives, and assigns without further compensation to perform such lawful acts and to sign such further applications, Assignments, preliminary statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment

in witness whereof, I, as a below-named inventor and assignor, intending to be legally bound, have hereuntoaffixed my signature on the date indicated below next to my signature.

| igventor's Legal Name     | KiM, Chulki  |  |            |
|---------------------------|--|--|------------|
| inventor's Signature      |  | Date                                   | m14. 1. 23 |
| Residence (City, Country) | Samcheok-si, Republic of Korea   | ······································ |            |
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| inventor's Legal Name     | KiM, Jae Hun   |  |            |

| inventor's Legal Name    | KIM, Jae Hun   |
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| Inventor's Signature     | On / Date Jan /22/2014   |
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# COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

| Inventor's Lagat Name     | JUN, Seong Chan  |
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| inventor's Legal Name     | LEE, Taikjin   |
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| inventor's Signature      | Date 23. Jan. 144  |
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