

## PATENT ASSIGNMENT COVER SHEET

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                               |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                                   |
| <b>CONVEYING PARTY DATA</b>   |  |
| <b>Name</b>   | <b>Execution Date</b>                        |
| KAI-HSUAN LEE   | 01/05/2018                                   |
| BO-YU LAI   | 01/05/2018                                   |
| CHI-ON CHUI   | 01/05/2018                                   |
| CHENG-YU YANG   | 01/05/2018                                   |
| YEN-TING CHEN   | 01/05/2018                                   |
| SAI-HOOI YEONG  | 01/05/2018                                   |
| FENG-CHENG YANG   | 01/05/2018                                   |
| YEN-MING CHEN   | 01/05/2018                                   |
| <b>RECEIVING PARTY DATA</b>   |  |
| <b>Name:</b>  | TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD. |
| <b>Street Address:</b>  | NO. 8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK   |
| <b>City:</b>  | HSINCHU                                      |
| <b>State/Country:</b>   | TAIWAN                                       |
| <b>Postal Code:</b>   | 300-78                                       |
| <b>PROPERTY NUMBERS Total: 1</b>  |  |
| <b>Property Type</b>  | <b>Number</b>                                |
| Application Number:   | 15875485                                     |
| <b>CORRESPONDENCE DATA</b>  |  |
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| <b>Email:</b>   | mailroom@bskb.com, Tuyet.A.Nguyen@bskb.com   |
| <b>Correspondent Name:</b>  | BIRCH, STEWART, KOLASCH & BIRCH, LLP         |
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| <b>ATTORNEY DOCKET NUMBER:</b>  | 0941-3684PUS2                                |
| <b>NAME OF SUBMITTER:</b>   | TUYET ANH NGUYEN                             |
| <b>SIGNATURE:</b>   | /TUYET ANH NGUYEN/                           |

|                     |            |
|---------------------|------------|
| <b>DATE SIGNED:</b> | 01/19/2018 |
|---------------------|------------|

**Total Attachments: 2**  
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source=2018-01-19\_Assignment\_0941-3684PUS2#page2.tif

**ASSIGNMENT**

WHEREAS, Kai-Hsuan LEE, Bo-Yu LAI, Chi-On CHUI, Cheng-Yu YANG, Yen-Ting CHEN, Sai-Hooi YEONG, Feng-Cheng YANG, and Yen-Ming CHEN

hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: SEMICONDUCTOR STRUCTURE AND METHOD FOR FORMING THE SAME

Filed: January 19, 2018

Serial No. 15/875,485

Executed on: January 5, 2018

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd., of No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu 300-78, Taiwan R.O.C., hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

Filed on January 19, 2018

ASSIGNMENT

2018/1/5                      Kai Hsuan Lee                      李 凱 璿  
 Date                              Name: Kai-Hsuan LEE

2018/1/5                      Bo-Yu Lai  
 Date                              Name: Bo-Yu LAI

2018/1/5                      Chi-On Chui  
 Date                              Name: Chi-On CHUI

2018.1.5                      Cheng Yu Yang  
 Date                              Name: Cheng-Yu YANG

2018.1.5                      Yen-Ting Chen  
 Date                              Name: Yen-Ting CHEN

2018/1/5                      Sai-Hooi Yeong  
 Date                              Name: Sai-Hooi YEONG

2018.1.5                      Feng-Cheng Yang  
 Date                              Name: Feng-Cheng YANG

2018.1.5                      Yen-Ming Chen  
 Date                              Name: Yen-Ming CHEN