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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RUNG-DE WANG	12/05/2017
CHEN-HSUN LIU	12/05/2017
CHIN-YU KU	12/05/2017
TE-HSUN PANG	12/05/2017
CHIA-HUA WANG	12/05/2017
PEI-SHING TSAI	12/05/2017
PO-CHANG LIN	12/05/2017

RECEIVING PARTY DATA

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Postal Code:	300-78

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15866472

CORRESPONDENCE DATA

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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.

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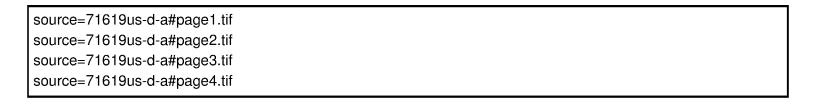
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ATTORNEY DOCKET NUMBER:	71619-US-PA
NAME OF SUBMITTER:	BELINDA LEE
SIGNATURE:	/Belinda Lee/
DATE SIGNED:	01/10/2018

Total Attachments: 4

PATENT REEL: 044579 FRAME: 0163



PATENT REEL: 044579 FRAME: 0164

DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

□ Declaration Submitted With Initial Filing
OR
☐ Declaration Submitted After Initial Filing (surcharge 37 CFR 1.16(f) required)
(Title of the Invention) SEMICONDUCTOR STRUCTURE AND MANUFACTURING METHOD THEREOF
As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
This declaration is directed to:
OR
☐ United States Application Number or PCT International application number
Filed on
The above-identified application was made or authorized to be made by me.
I believe I am the original inventor or an original joint inventor of a claimed invention in
the application.
The undersigned 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.

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DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

WHEREAS 1. Taiwan Semiconductor Manufacturing Co., Ltd.

of No.8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C.

hereinafter referred to as ASSIGNEE, is desirous of acquiring the undersigned'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 the undersigned, the undersigned 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 rights, title and interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said the undersigned 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.

The undersigned 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.

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DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

Signature: Rung De Vang	Date: >017, 1>.05		
Legal Name of Sole or First Inventor: Rung-De Wang			
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Legal Name of Additional Joint Inventor, if any. Chin-Yu Ru			
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Signature: Je ha han Jones Legal Name of Additional Joint Inventor, if any. Tel-Hsun Pal	Date: Nec 5 >0//		
Residence: Tainan City, Taiwan	wint Doub / John Phys. This was 200, 27		
Mailing Address: No8, Li-Hsin Rd. 6, Science-Based Indust R.O.C.	natrata i taronia, tanam 200-17.		
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Mailing Address: c/o No.8, Ll-Hsin Rd, 6, Hsinchu Science Park, Hsinchu, Talwan 306-78, R.O.C.			
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DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

Signature:	Po-Charg	Lin	Date:	2019/12/05	
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