

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3969517

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SHOU-ZEN CHANG	07/15/2016
CHI-MING HUANG	07/15/2016
KAI-CHIANG WU	07/15/2016
SEN-KUEI HSU	07/18/2016
HSIN-YU PAN	07/18/2016
HAN-PING PU	07/19/2016
ALBERT WAN	07/15/2016
<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>	300-78
<b>State/Country:</b>	TAIWAN
<b>Postal Code:</b>	300-78
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15210067
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(404)521-4286
<i>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.</i>	
<b>Phone:</b>	678-483-8899
<b>Email:</b>	dan.mcclure@mqlaw.com
<b>Correspondent Name:</b>	MCCLURE, QUALEY & RODACK, LLP
<b>Address Line 1:</b>	3100 INTERSTATE NORTH CIRCLE
<b>Address Line 2:</b>	SUITE 150
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30339
<b>ATTORNEY DOCKET NUMBER:</b>	252011-6020
<b>NAME OF SUBMITTER:</b>	DANIEL R. MCCLURE
<b>SIGNATURE:</b>	/Daniel R. McClure/
<b>DATE SIGNED:</b>	07/20/2016

PATENT

**Total Attachments: 2**

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## ASSIGNMENT

WHEREAS, Shou-Zen CHANG, Chi-Ming HUANG, Kai-Chiang WU, Sen-Kuei HSU, Hsin-Yu PAN, Han-Ping PU, and Albert WAN

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 DEVICE STRUCTURE AND METHOD FOR FORMING THE SAME

Filed: 2016-07-14 Serial No. 15/210,067

Executed on: \_\_\_\_\_

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.

### ASSIGNMENT

2016. 7. 15                      Shou-Zen Chang  
Date                              Name: Shou-Zen CHANG              (Last name: CHANG)

2016/7/15                      Chi-Ming Huang  
Date                              Name: Chi-Ming HUANG              (Last name: HUANG)

2016. 7. 15                      Kai-Chiang Wu  
Date                              Name: Kai-Chiang WU              (Last name: WU)

2016. 7. 18                      Sen-Kuei Hsu  
Date                              Name: Sen-Kuei HSU              (Last name: HSU)

2016. 7. 18                      Pan Yu  
Date                              Name: Hsin-Yu PAN              (Last name: PAN)

2016. 7. 19                      Han-Ping Pu  
Date                              Name: Han-Ping PU              (Last name: PU)

2016/7/15                      Albert Wan  
Date                              Name: Albert WAN              (Last name: WAN)