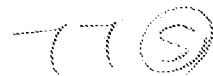


PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5594917

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
BO-FENG YOUNG	05/24/2019
CHIH-YU CHANG	05/24/2019
SAI-HOOI YEONG	05/24/2019
CHI-ON CHUI	05/29/2019
CHIH-HAO WANG	05/29/2019
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
Street Address:	NO. 8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16427078
CORRESPONDENCE DATA	
Fax Number:	(703)205-8050
<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>	
Phone:	7032058000
Email:	mailroom@bskb.com, phillip.tashjian@bskb.com
Correspondent Name:	BIRCH, STEWART, KOLASCH & BIRCH, LLP.
Address Line 1:	8110 GATEHOUSE ROAD, SUITE 100E
Address Line 4:	FALLS CHURCH, VIRGINIA 22040-0747
ATTORNEY DOCKET NUMBER:	0941-4006PUS1
NAME OF SUBMITTER:	PHILLIP R. TASHJIAN
SIGNATURE:	/Phillip R. Tashjian/
DATE SIGNED:	06/27/2019
Total Attachments: 2	
source=2019-06-27_Assignment_0941-4006PUS1#page1.tif	



ASSIGNMENT

WHEREAS, Bo-Feng YOUNG, Chih-Yu CHANG, Sai-Hooi YEONG, Chi-On CHUI and Chih-Hao WANG

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 WITH NEGATIVE CAPACITANCE STRUCTURE AND METHOD FOR FORMING THE SAME**

Filed: May 30, 2019 Serial No. 16/427,078
 Executed on: May 24, 2019 and May 29, 2019

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;


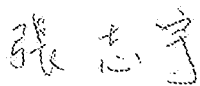
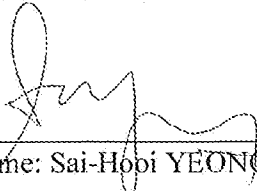
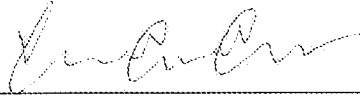
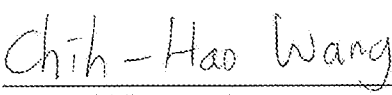
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors 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.

0941-4006PUS1

ASSIGNMENT

<u>20/5/2019</u>	
Date	Name: Bo-Feng YOUNG
<u>24/5/2019</u>	
Date	Name: Chih-Yu CHANG
<u>24/5/2019</u>	
Date	Name: Sai-Hopi YEONG
<u>5/29/2019</u>	
Date	Name: Chi-On CHUI
<u>5/29/2019</u>	
Date	Name: Chih-Hao WANG