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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
KUO-CHENG CHING	12/14/2015
CHUNG-CHENG WU	12/21/2015
CHING-FANG HUANG	12/14/2015
WEN-HSING HSIEH	12/16/2015
YING-KEUNG LEUNG	12/14/2015
CHENG-TING CHUNG	12/21/2015

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	NO. 8, LI-HSIN RD. 6	
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK	
City:	HSIN-CHU	
State/Country:	TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15887347

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ATTORNEY DOCKET NUMBER:	2015-0931/24061.3215US02
NAME OF SUBMITTER:	KYLE HOWARD
SIGNATURE:	/Kyle Howard/
DATE SIGNED:	02/02/2018

504760813 REEL: 044820 FRAME: 0195

Total Attachments: 3

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PATENT REEL: 044820 FRAME: 0196

Docket No.: P20150931US00/24061.3215US01

Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

(1)	Kuo-Cheng Ching	of	Hsinchu County, Taiwan, Republic of China
(2)	Chung-Cheng Wu	of	Hsin-Chu County, Taiwan, Republic of China
(3)	Ching-Fang Huang	of	Taipei, Taiwan, Republic of China
(4)	Wen-Hsing Hsieh	of	Hsinchu City, Taiwan, Republic of China
(5)	Ying-Keung Leung	of	Hsin-Chu, Taiwan, Republic of China
(6)	Cheng-Ting Chung	of	Hsin-Chu, Taiwan, Republic of China

have invented certain improvements in

MULTI-GATE DEVICE AND METHOD OF FABRICATION THEREOF

for which we have executed an application for Letters Patent of the United States of America,

		of even date filed herewith; and
	X	filed on November 16, 2015 and assigned application number 14/941,745
and		• • • • • • • • • • • • • • • • • • • •

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

15468348_1 - 1 -

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Docket No.: P20150931US00/24061.3215US01

Customer No.: 000042717

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name:	Kuo-Cheng Ching
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Dated: 7017/12	1 LV Kyo - Cung Cung Inventor Signature
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Dated: "2015/12/	Church Chen Wu Inventor Aignature

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Dated: 2015 / 12 / 14

Ching-Fang Huang

Inventor Name:

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Inventor Signature

15468348 1

-2-

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Docket No.: P20150931US00/24061.3215US01

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- 3 -

PATENT REEL: 044820 FRAME: 0199