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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
YU-HSUAN YANG	11/29/2017
CHIA YING LIN	11/27/2017
TZY-KUANG LEE	11/29/2017
WEN HAN HUNG	11/29/2017

#### **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.		
Street Address:	8, LI-HSIN RD. 6		
Internal Address:	HSINCHU SCIENCE PARK		
City:	HSINCHU		
State/Country:	TAIWAN		
Postal Code:	300-78		

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15840994

#### **CORRESPONDENCE DATA**

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SIGNATURE:	/Calmann J. Clements/
NAME OF SUBMITTER:	CALMANN J. CLEMENTS
ATTORNEY DOCKET NUMBER:	P20172359/24061.3640US01

Total Attachments: 2

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> PATENT REEL: 044390 FRAME: 0559



Docket No.: P20172359US00 / 24061.3640US01

Customer No.: 42717

#### ASSIGNMENT

WHEREAS, we,

(1)	Yu-Hsuan Yang	of	Hsinchu, Taiwan 300-78, Republic of China
(2)	Chia Ying Lin	of	Hsinchu, Taiwan 300-78, Republic of China
(3)	Tzy-Kuang Lee	of	Hsinchu, Taiwan 300-78, Republic of China
(4)	Wen Han Hung	of	Hsinchu, Taiwan 300-78, Republic of China

have invented certain improvements in

### **BLOCKING STRUCTURES ON ISOLATION STRUCTURES**

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

X	of even date filed h		
	filed on	and assigned application number	; 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 Co., Ltd., ("TSMC"), 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, 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.

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

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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:

Yu-Hsuan Yang

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8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78

Dated: 11-29-2017

Inventor Signature

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Dated: 1/-29-20/

Chia - Ying Line
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Dated: 1/-29-2017

Try-Kuang Lang Inventor Signature

Inventor Name:

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Dated: 1/-39->019

Wen- Wan Johng Inventor Signature

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**RECORDED: 12/13/2017** 

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