PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHIH-CHUAN YANG	06/11/2019
CHANG-TA YANG	06/19/2019

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:	16450278		

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Email: ipdocketing@haynesboone.com

HAYNES AND BOONE. LLP IP SECTION **Correspondent Name:**

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Address Line 2: SUITE 700

Address Line 4: DALLAS, TEXAS 75219

ATTORNEY DOCKET NUMBER:	2018-2858/24061.3853US01
NAME OF SUBMITTER:	YILUN WANG
SIGNATURE:	/Yilun Wang/
DATE SIGNED:	06/24/2019

Total Attachments: 4

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> **PATENT** REEL: 049571 FRAME: 0062 505540882

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PATENT REEL: 049571 FRAME: 0063

Docket No.: P20182858US00/24061,3853US01

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1) Chih-Chuan Yang of Hsinchu, Taiwan, Republic of China

(2) Chang-Ta Yang of Hsinchu City, Taiwan, Republic of China

have invented certain improvements in

FINFET CIRCUIT DEVICES WITH WELL ISOLATION

for which	we have	executed a	n applicat	ion for Lette	rs Patent	of the Uni	ited States of	America,
نسسد.	<u>X</u>	of even d	ate filed h	erewith; and				
ليبنن	*************	filed on		and assigne	d applica	ation numb	er	_; 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 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.

Docket No.: P20182858US00/24061,3853US01

Customer No.: 42717

Inventor Name: Residence Address:	Chih-Chuan Yang 8, Li-Hsin Rd. 6 Hsinchu, Taiwan 300-78, Republic of China				
Dated: <u>Ely</u>	Inventor Signature				
Inventor Name:	Chang-Ta Yang				
Residence Address:	No. 28, Ln. 443, Minghu Rd., East Dist. Hsinchu City 300, Taiwan, Republic of China				
Dated:					
	Inventor Signature				

Docket No.: P20182858US00/24061,3853US01

Customer No.: 42717

ASSIGNMENT

WHERE	AS.	we.
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(1) Chib-Chuan Yang of Hsinchu, Taiwan, Republic of China

(2) Chang-Ta Yang of Hsinchu City, Taiwan, Republic of China

have invented certain improvements in

FINFET CIRCUIT DEVICES WITH WELL ISOLATION

for which v	we have	executed an	application for Letters Patent of the United	States of America,
	<u>X</u>	of even da	te filed herewith; and	
Sisteria		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 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.

Docket No.: P20182858US@V24061.3853US@1

Customer No.: 42717

Inventor Name:

Chib-Chuan Yang

Residence Address:

8, Li-Hsin Rd. 6

Hsinchu, Taiwan 300-78, Republic of China

Owed:	In take Signature	
Inventor Name.	Chang-Ta Yang	
Residence Address:	No. 28, Ln. 443, Mingho Rd., East Dist. Heinchu City 300, Tanvan, Republic of China	
Del 2019/	6119 Cly-Ta You	

Inventor Signature