505130417 10/08/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MING-FENG SHIEH	10/01/2013
WEN-HUNG TSENG	10/01/2013
TZUNG-HUA LIN	10/01/2013
HUNG-CHANG HSIEH	10/02/2013

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:	16153956

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	2013-0990/24061.2631US03
NAME OF SUBMITTER:	BRIAN D. GRAHAM
SIGNATURE:	/Brian D. Graham/
DATE SIGNED:	10/08/2018

Total Attachments: 3

PATENT REEL: 047090 FRAME: 0903

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PATENT REEL: 047090 FRAME: 0904

Docket No.: 2013-0990/24061.2631

Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

(1)	Ming-Feng Shieh	of	No. 68, Lane 186, Shenglong Street Yongkang City, Tainan County 71089 Taiwan, R.O.C.
(2)	Wen-Hung Tseng	of	No. 34, Liming Street Luodong Township, Yilan County 265 Taiwan, R.O.C.
(3)	Tzung-Hua Lin	of	4F., Number 198, Section 2 Fuxing S. Road, Taipe, Taiwan, R.O.C.
(4)	Hung-Chang Hsieh	of	9F, Number 72-12, Lane 531, Section 1 Kung-Fu Road, Hsin-Chu City Taiwan, R.O.C.

have invented certain improvements in

METHOD OF MAKING A FINFET DEVICE

for which we have executed an application for Letters Patent of the United States of America,
of even date filed herewith; 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.);

filed on October 18, 2013, and assigned application number 14/057,789; and

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

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PATENT REEL: 047090 FRAME: 0906

Docket No.: 2013-0990/24061.2631

Customer No.: 000042717

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.

Inventor Name:	Ming-Feng Shìeh	
Residence Address:	No. 68, Lane 186, Shenglong Street Yongkang City, Tainan County 71089, Taiwan, R.O.C.	
Dated: (0/1, >	0/3	Hing-Fong Shieh. Inventor Signature
Inventor Name:	Wen-Hung Tseng	
Residence Address:	No. 34, Liming Street, Luodong Taiwan, R.O.C.	g Township, Yilan County 265
Dated: (0/1 , 24	013	Wen-Houg Trong
		Inventor Signature
Inventor Name:	Tzung-Hua Lin	
Residence Address:	4F., Number 198, Section 2 Fuxing S. Road, Taipe, Taiwan, R.O.C.	
Dated: 10//. 20	713	Trang Huse 4.

Docket No.: 2013-0990/24061.2631

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Inventor Name:

Hung-Chang Hsieh

Residence Address:

9F, Number 72-12, Lane 531, Section 1

Kung-Fu Road, Hsin-Chu City, Taiwan, R.O.C.

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Dated:_

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Inventor Signature

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RECORDED: 10/08/2018

- 3 -