PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6284346

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHUN-HAO HSU	01/05/2019
YU-CHUN KO	01/05/2019
YU-CHANG LIANG	01/05/2019
KAO-TING KAI	01/05/2019

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
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State/Country:	TAIWAN	
Postal Code:	300-78	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17012222

CORRESPONDENCE DATA

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Tatal Attachments O	
DATE SIGNED:	09/04/2020
SIGNATURE:	/Linda Ingram/
NAME OF SUBMITTER:	LINDA INGRAM
ATTORNEY DOCKET NUMBER:	2018-0016/24061.3722US02

Total Attachments: 2

PATENT REEL: 053693 FRAME: 0796 source=3722US02_Assignment#page1.tif source=3722US02_Assignment#page2.tif

PATENT REEL: 053693 FRAME: 0797



Docket No.: P20180016US00/ 24061.3722US01 Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

(1)	Chun-Hao Hsu	of	New Taipei City, Taiwan (R.O.C.)
(2)	Yu-Chun Ko	of	Hsinchu, Taiwan (R.O.C.)
(3)	Yu-Chang Liang	of	Kaohsiung City, Taiwan (R.O.C.)
(4)	Kao-Ting Lai	of	Hsinchu City, Taiwan (R.O.C.)

have invented certain improvements in

FINFET WITH DUMMY FINS AND METHODS OF MAKING THE SAME

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

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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:	Chun-Hao Hsu	
Residence Address:	New Taipei City, Taiwan (R.O	.C.)
Dated: 70/9. /.	<u> </u>	Chun - Hax Hsm Inventor Signature
Inventor Name:	Yu-Chun Ko	
Residence Address:	Hsinchu, Taiwan (R.O.C.)	
Dated: / / ⊱	12019	Inventor Signature
		mventor signature
Inventor Name:	Yu-Chang Liang	
Residence Address:	Kaohsiung City, Taiwan (R.O.C	T)
Dated:/	1 7019	Yu-Chang Liang Inventor Signature
Inventor Name: k	Cao-Ting Lai	
Residence Address: F	Hsinchu City, Taiwan (R.O.C.)	
Dated: \sqrt{\sq}}}}}}}}}} \signtimes\sinthintity}}}} \signtimes\sinthintit{\sintit{\sinthintit{\sintitta}\sinthintit{\sintitta}\sinthintit{\sintitta}\sinthintit{\sintitta}\sintitit{\sintitta}\sintititit{\sintitta}\sintititit{\sintitta}\sintititit{\sintitit{\sintititit{\sintititit{\sintititit{\sintititit{\sintitititititititititititititititititit	2019	Inventor Signature
	Residence Address: Dated: 70/9 / / . Inventor Name: Residence Address: Dated: 7 / 5 Inventor Name: Residence Address: H Dated: 7 / 5 Inventor Name: R Residence Address: H Residence Address: H	Residence Address: New Taipei City, Taiwan (R.O.Dated: 70/9 / 5 Inventor Name: Yu-Chun Ko Residence Address: Hsinchu, Taiwan (R.O.C.) Dated: 70/9 / 20/9 Inventor Name: Yu-Chang Liang Residence Address: Kaohsiung City, Taiwan (R.O.C.) Dated: 70/9 / 50/9

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RECORDED: 09/04/2020

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