506260002 09/18/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BO-CYUAN LU	08/25/2020
TING-GANG CHEN	08/25/2020
SUNG-EN LIN	08/27/2020
CHUNYAO WANG	08/27/2020
YUNG-CHENG LU	08/28/2020
CHI ON CHUI	08/28/2020
TAI-CHUN HUANG	08/25/2020
CHIEH-PING WANG	08/25/2020

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Co., Ltd.	
Street Address:	8, Li-Hsin Rd. 6, Hsinchu Science Park	
City:	Hsinchu	
State/Country:	TAIWAN	
Postal Code:	300-78	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	17025528	

CORRESPONDENCE DATA

Fax Number: (972)732-9218

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

Phone: 972-732-1001

Email: docketing@slatermatsil.com

Correspondent Name: SLATER MATSIL, LLP

Address Line 1: 17950 PRESTON RD., SUITE 1000

Address Line 4: DALLAS, TEXAS 75252

ATTORNEY DOCKET NUMBER: TSMP20194448US01	
NAME OF SUBMITTER: LISETTE REYES-WASHINGTON	
SIGNATURE:	/Lisette Reyes-Washington/

PATENT 506260002 REEL: 053819 FRAME: 0757

DATE SIGNED: 09/18/2020

Total Attachments: 2
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PATENT REEL: 053819 FRAME: 0758

ATTORNEY DOCKET NO. TSMP20194448US01

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, with its principal office at 8, Li-Hsin Rd. 6 Hsinchu Science Park, Hsinchu 300-78, Taiwan, is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to said Assignee, its successors and assigns, my entire right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all future non-provisional applications including divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to said Assignee, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said Assignee, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said Assignee, its legal representatives, successors, or assigns, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said Assignee, its legal representatives, successors, and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	SEMICONDUCTOR DEVICES AND METHODS OF MANUFACTURE			
SIGNATURE OF INVENTOR AND NAME	Bo-Guan Lu Bo-Cyuan Lu	Ting-Gang Chen Ting-Gang Chen	Sung En Lin	Chunyao Wang
DATE	>070 . vd . >5	1020/8/25	2020/8/27	2020/8/27
RESIDENCE	New Taipel City, Taiwan	Taipei City, Taiwan	Hsinchu, Taiwan	Zhubei City, Taiwan

RECORDED: 09/18/2020



ATTORNEY DOCKET NO. TSMP20194448US01

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made; and

WHEREAS. Taiwan Semiconductor Manufacturing Co., Ltd. ("Assignee"), a corporation organized and existing under the laws of Taiwan, with its principal office at 8, Li-Hsin Rd. 6 Hsinchu Science Park, Hsinchu 300-78 Taiwan, is desirous of acquiring my entire right, title and interest in and to said invention, and to said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to said Assignee, its successors and assigns, my entire right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all future non-provisional applications including divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to said Assignee, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said Assignee, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said Assignee, its legal representatives, successors, or assigns, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said Assignee, its legal representatives, successors, and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year,

TITLE OF INVENTION	SEMICONDUCTOR DEVICES AND METHODS OF MANUFACTURE			
SIGNATURE OF INVENTOR AND NAME	///	Chi On Chui	Tai-Chun Huang	Chieh-Ping Wang
DATE	2929/8/28	5 1 × 1	2020/8/25	>>>/8/>5
RESIDENCE	Hsinchu, Taiwan	Hsinchu, Taiwan	Hsinchu, Taiwan	Taichung, Taiwan

Page 2 of 2

Assignment

PATENT REEL: 053819 FRAME: 0760