506029164 04/23/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LI-ZHEN YU	04/07/2020
LIN-YU HUANG	04/07/2020
CHENG-CHI CHUANG	04/07/2020
YU-MING LIN	04/07/2020
CHIH-HAO WANG	04/07/2020

RECEIVING PARTY DATA

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City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300-78	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16855690

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	0941-4108PUS2
NAME OF SUBMITTER:	LYNN LAM
SIGNATURE:	/lynn lam/
DATE SIGNED:	04/23/2020

Total Attachments: 2

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PATENT 506029164 REEL: 052481 FRAME: 0220

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PATENT REEL: 052481 FRAME: 0221

ASSIGNMENT

WHEREAS, Li-Zhen YU, Lin-Yu HUANG, Cheng-Chi CHUANG, Yu-Ming LIN and Chih-Hao WANG

hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: VIA STRUCTURE HAVING LOW INTERFACE RESISTANCE AND METHOD FOR FORMING THE SAME

Filed: April 22, 2020	Sprint No. 16955600
1 11Cu. 7 pm 22, 2020	Senai NO. 10033090
Executed on: April 7, 2020	
EXCOUNT OIL ADIII 1, 2020	

WHEREAS, <u>Taiwan Semiconductor Manufacturing Co., Ltd.</u>, of <u>No. 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu 300-78, Taiwan R.O.C.</u>, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

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ASSIGNMENT

04/07/2020	Name: Li-Zhen YU
Date	Name: Li-Zhen YU ()
04/97/2020 Date	Name: Lin-Yu HUANG
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4/7/2020	Openg Chi Churg Name: Cheng Chi CHUANG
Date* / /	Name: Cheng-Chi CHUANG
4/7/200	4-hr:
Date	Name: Yu-Ming LIN
4/1/2020	Chih-Hao Wang
Date	Name: Chih-Hao WANG