## 504760425 02/02/2018

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
PING-YIN LIU	09/24/2012
KAI-WEN CHENG	09/24/2012
XIN-HUA HUANG	09/24/2012
LAN-LIN CHAO	09/24/2012
CHIA-SHIUNG TSAI	09/24/2012
XIAOMENG CHEN	09/27/2012

#### **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.		
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City:	HSIN-CHU		
State/Country:	TAIWAN		
Postal Code:	300-77		

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15887142

#### **CORRESPONDENCE DATA**

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NAME OF SUBMITTER:	YILUN WANG
SIGNATURE:	/Yilun Wang/
DATE SIGNED:	02/02/2018

504760425 PATENT REEL: 044814 FRAME: 0887

## **Total Attachments: 4**

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PATENT REEL: 044814 FRAME: 0888

Customer No.: 42717

### ASSIGNMENT

WHEREAS, we,				
(1)	Ping-Yin Liu	of	3F, No. 7, Bao-An Road Yonghe City, Taipei City 234, Taiwan, R.O.C.	
(2)	Kai-Wen Cheng	of	No. 45-2, Wenchang E 6th Street, Beitun District Taichung City 406, Taiwan, R.O.C.	
(3)	Xin-Hua Huang	of	No. 276, Zhonggong Road Xihu Township, Changhua County 514, Taiwan, R.O.C.	
(4) ·	Lan-Lin Chao	of	3F, No. 113, Zihli Street Sindian City, Taipei County, Taiwan, R.O.C.	
(5)	Chia-Shiung Tsai	of	No. 5, Alley 50, Lane 62, Gua-Tsuey Road Hsin-Chu, Taiwan, R.O.C	
(6)	Xiaomeng Chen	of	Room 3309, No. 22, Alley 10, Lane 52, Baoshan Rd., East District Hsinchu City 300, Taiwan, R.O.C.	

have invented certain improvements in

# MULTIPLE METAL LAYER SEMICONDUCTOR DEVICE AND LOW TEMPERATURE STACKING METHOD OF FABRICATING THE SAME

1 and application for Letters Patent of the United States of	America on
for which we have executed an application for Letters Patent of the United States of	
October 12, 2012 , as U.S. Serial No. 13/651,045 ; 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 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.

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PATENT REEL: 024823 FRAME: 0289

Customer No.: 42717

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.

Ping-Yin Liu

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Dated: 20/2. 9. 24

Inventor Signature

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9. 24

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09/24/2012

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