

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
XIONG-FEI YU	08/26/2011
CHUN-YUAN CHOU	08/26/2011
DA-YUAN LEE	08/26/2011
KUANG-YUAN HSU	08/29/2011
JEFF J. XU	08/26/2011
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	8, LI-HSIN RD. 6
Internal Address:	HSINCHU SCHIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16400677
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	2146515000
Email:	ipdocketing@haynesboone.com
Correspondent Name:	HAYNES AND BOONE, LLP IP SECTION
Address Line 1:	2323 VICTORY AVENUE
Address Line 2:	SUITE 700
Address Line 4:	DALLAS, TEXAS 75219
ATTORNEY DOCKET NUMBER:	2011-0515/24061.3000US05
NAME OF SUBMITTER:	KYLE HOWARD
SIGNATURE:	/Kyle Howard/
DATE SIGNED:	05/01/2019

Total Attachments: 3

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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|----------------|----|---|
| (1) | Xiong-Fei Yu | of | No. 11, #2F-3, Jinshan Street 25
Hsinchu 300 Taiwan, R.O.C. |
| (2) | Chun-Yuan Chou | of | 8F, No 129, TongBei Street
Taipei Taiwan, R.O.C. |
| (3) | Da-Yuan Lee | of | 10F., No.172, Sec. 2, Jiafong S. Road
Jhubei City, Hsinchu County 302
Taiwan R.O.C. |
| (4) | Kuan-Yuan Hsu | of | No.7, Ln. 190, Beiyang Road
Fongyuan City, Taichung County 420
Taiwan R.O.C. |
| (5) | Jeff J. Xu | of | No. 296-5, 14F, Guangming 6th Road, E. Section 1
Jhubei City, Hsinchu County, Taiwan |

have invented certain improvements in

TECHNIQUES PROVIDING METAL GATE DEVICES WITH MULTIPLE BARRIER LAYERS

for which we have executed an application for Letters Patent of the United States of America on September 1, 2011, as U.S. Serial No. 13/224,033; 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.);

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

FULL NAME OF INVENTOR: Xiong-Fei Yu

INVENTOR'S SIGNATURE: Yin Xiong Fei

DATED: 2011/08/26

RESIDENCE: Hsinchu 300 Taiwan, R.O.C.

POST OFFICE ADDRESS: No. 11, #2F-3, Jinshan Street 25
Hsinchu 300 Taiwan, R.O.C.

CITIZENSHIP: Singapore

FULL NAME OF INVENTOR: Chun-Yuan Chou

INVENTOR'S SIGNATURE: Chun-Yuan Chou

DATED: 2011/08/26

RESIDENCE: Taipei Taiwan, R.O.C.

POST OFFICE ADDRESS: 8F, No 129, TongBei Street
Taipei Taiwan, R.O.C.

CITIZENSHIP: Taiwan, R.O.C.

FULL NAME OF INVENTOR: Da-Yuan Lee

INVENTOR'S SIGNATURE: Da-Yuan Lee

DATED: 2011/08/26

RESIDENCE: Jhubei City, Hsinchu County 302 Taiwan R.O.C.

POST OFFICE ADDRESS: 10F., No.172, Sec. 2, Jiafong S. Road
Jhubei City, Hsinchu County 302 Taiwan R.O.C.

CITIZENSHIP: Taiwan, R.O.C.

Docket No.: 2011-0515 / 24061.1881
Customer No.: 42717

Inventor Name: Kuan-Yuan Hsu

Residence Address: No.7, Ln. 190, Beiyang Road
Fongyuan City, Taichung County 420, Taiwan R.O.C.

Dated: 08/29/2011

Kuan-Yuan Hsu
Inventor Signature

Inventor Name: Jeff J. Xu

Residence Address: No. 296-5, 14F, Guangming 6th Road, E. Section 1
Jhubei City, Hsinchu County, Taiwan

Dated: 08/26/2011

[Signature]
Inventor Signature