PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4561211

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNOR WANN, CLEMENT HSINGJEN'S EXECUTION DATE FROM 1/14/2013 TO 1/17/2013. previously recorded on Reel 042602 Frame 0668. Assignor(s) hereby confirms the CORRECTIONS MADE TO THE ASSIGNOR WANN, CLEMENT HSINGJEN'S EXECUTION DATE.

CONVEYING PARTY DATA

Name	Execution Date
YU-LIEN HUANG	01/14/2013
CHI-WEN LIU	01/14/2013
ZHAO-CHENG CHEN	01/14/2013
MING-HUAN TSAI	01/14/2013
CLEMENT HSINGJEN WANN	01/17/2013

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-SHIN RD. 6. SCIENCE BASED INDUSTRIAL PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15614274

CORRESPONDENCE DATA

Fax Number: (214)200-0853

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.

Phone: 214-651-5000
Email: ipdocketing@haynesboone.com
Correspondent Name: HAYNES AND BOONE, LLP
Address Line 1: 2323 VICTORY, SUITE 700
Address Line 4: DALLAS, TEXAS 75219

ATTORNEY DOCKET NUMBER:	20120980/24061.2329US03
NAME OF SUBMITTER:	JO EL MERCER
SIGNATURE:	/Jo El Mercer/
DATE SIGNED:	08/22/2017

Total Attachments: 6

source=24061-2329US03 Corrected Assignment#page1.tif
source=24061-2329US03 Corrected Assignment#page2.tif
source=24061-2329US03 Corrected Assignment#page3.tif
source=24061-2329US03 Corrected Assignment#page4.tif
source=24061-2329US03 Corrected Assignment#page5.tif
source=24061-2329US03 Corrected Assignment#page6.tif

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4445005

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YU-LIEN HUANG	01/14/2013
CHI-WEN LIU	01/14/2013
ZHAO-CHENG CHEN	01/14/2013
MING-HUAN TSAI	01/14/2013
CLEMENT HSINGJEN WANN	01/14/2013

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. 6
Internal Address:	SCIENCE BASED INDUSTRIAL PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15614274

CORRESPONDENCE DATA

Fax Number: (214)200-0853

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.

Phone: 214-651-5000
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:	20120980/24061.2329US03
NAME OF SUBMITTER:	JO EL MERCER
SIGNATURE:	/Jo El Mercer/
DATE SIGNED:	06/05/2017

Docket No.: 2012-0980 / 24061.2329
Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1) Yu-Lien Huang of 3F., No. 123, Jhuangjing 3rd Road
Jhubei City, Hsinchu County 302, Taiwan R.O.C.

(2) Chi-Wen Liu of 3F, No. 561, Nan-Da Road
Hsinchu, Taiwan R.O.C.

(3) Zhao-Cheng Chen of 1F., No. 52, Zhonghua Street, Luzhou District
New Taipei City 247, Taiwan R.O.C.

(4) Ming-Huan Tsai of 8F., No.41, Guangming 6th Road
Zhubei City, Hsinchu County 302, Taiwan R.O.C.

(5) Clement Hsingjen Wann of 1179 Barrett Circle West
Carmel, New York 10512

have invented certain improvements in

SEMICONDUCTOR DEVICE HAVING MODIFIED PROFILE METAL GATE

for which we have executed an application for Letters Patent of the United States of America, filed on ____________ and assigned application number __________________; 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.

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.

Inventor Name: Yu-Lien Huang

Residence Address: 3F., No. 123, Jhuangjing 3rd Road
Jhubei City, Hsinchu County 302, Taiwan R.O.C.

Dated: 2013, 1, 14

Yu-Lien Huang
Inventor Signature

Inventor Name: Chi-Wen Liu

Residence Address: 3F, No. 561, Nan-Da Road
Hsinchu, Taiwan R.O.C.

Dated: 2013/1/14

Chi-Wen Liu
Inventor Signature

Inventor Name: Zhao-Cheng Chen

Residence Address: 1F., No. 52, Zhonghua Street, Luzhou District
New Taipei City 247, Taiwan R.O.C.

Dated: 2013/1/14

Zhao-Cheng Chen
Inventor Signature

Docket No.: 2012-0980 / 24061.2329
Customer No.: 42717

Inventor Name: Ming-Huan Tsai

Residence Address: 8F., No.41, Guangming 6th Road
Zhubei City, Hsinchu County 302, Taiwan R.O.C.

Dated: 1/14/2013

Ming Huan Tsai
Inventor Signature

Inventor Name: Clement Hsingjen Wann

Residence Address: 1179 Barrett Circle West
Carmel, New York 10512

Dated: 1/17/2013

Clement
Inventor Signature
