#### 505831048 12/19/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5877981

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHUI-JUNG CHIU	10/23/2012
JEN-CHIEH LO	10/23/2012
YING-CHOU CHENG	10/23/2012
RU-GUN LIU	10/23/2012

## **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	8, LI-HSIN RD. 6	
Internal Address:	HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300-78	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16721360

### **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

HAYNES AND BOONE, LLP (24061) IP SECTION **Correspondent Name:** 

Address Line 1: 2323 VICTORY AVENUE

SUITE 700 Address Line 2:

Address Line 4: DALLAS, TEXAS 75219

ATTORNEY DOCKET NUMBER:	2012-0590/24061.2233US04
NAME OF SUBMITTER:	MARCY OGADO
SIGNATURE: /Marcy Ogado/	
DATE SIGNED:	12/19/2019

**Total Attachments: 3** 

505831048

**PATENT REEL: 051337 FRAME: 0448**  source=2233US04\_Assignment#page1.tif source=2233US04\_Assignment#page2.tif source=2233US04\_Assignment#page3.tif

> PATENT REEL: 051337 FRAME: 0449

Docket No.: 2012-0590 / 24061.2233

Customer No.: 42717

#### ASSIGNMENT

WHEREAS, we,			
(1)	Chui-Jung Chiu	of	14F, No. 46, Chia Cheng 2nd Street Zhubei City, Hsinchu County 302, Taiwan, R.O.C.
(2)	Jen-Chieh Lo	of	1F, No. 12, Lane 62, Chelutou Street, Sanchong District New Taipei City 241, Taiwan, R.O.C.
(3)	Ying-Chou Cheng	of	7F-2, No. 21, Sec. 1, Jiafeng 11th Road Zhubei City, Hsinch County 302, Taiwan, R.O.C.
(4)	Ru-Gun Liu	of	No. 90, Chenggong 5th Street Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

have invented certain improvements in

# METHOD FOR VALIDATING MEASUREMENT DATA

for which we have filed and executed an application for Letters Patent of the United States of America on November 1, 2012 Serial No. 13/666,140; 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, 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, 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

R-2233 - 2012-0590 - Assignment 10-18-12.doc

Page 1 of 3

Docket No.: 2012-0590 / 24061.2233

Customer No.: 42717

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:

Chui-Jung Chiu

Residence Address:

14F, No. 46, Chia Cheng 2nd Street

Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 10/23/2017

<u>Chui - Jung Chiu</u> Inventor Signature

Inventor Name:

Jen-Chieh Lo

Residence Address:

1F, No. 12, Lane 62, Chelutou Street, Sanchong District

New Taipei City 241, Taiwan, R.O.C.

Dated: 10/23/2012

<u>Jen - Chieh Lo</u> Inventor Signature

Inventor Name:

Ying-Chou Cheng

Residence Address:

7F-2, No. 21, Sec. 1, Jiafeng 11th Road

Zhubei City, Hsinch County 302, Taiwan, Taiwan, R.O.C.

10/3/2012

Jwg - Chon Cheng Inventor Signature

Docket No.: 2012-0590 / 24061.2233

Customer No.: 42717

Inventor Name:

Ru-Gun Liu

Residence Address:

No. 90, Chenggong 5th Street

Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: ( % / > 2 > > ( 2

Inventor Signature

R-2233 - 2012-0590 - Assignment 10-18-12,doc

**RECORDED: 12/19/2019** 

Page 3 of 3