# 504598361 10/17/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date
YU-TIEN SHEN	08/28/2017
YA-WEN YEH	08/28/2017
WEI-LIANG LIN	09/01/2017
YA HUI CHANG	08/28/2017
YUNG-SUNG YEN	09/01/2017
WEI-HAO WU	08/29/2017
LI-TE LIN	09/01/2017
RU-GUN LIU	09/06/2017
KUEI-SHUN CHEN	09/05/2017

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# **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	15689172	

### **CORRESPONDENCE DATA**

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504598361 PATENT REEL: 043887 FRAME: 0368

NAME OF SUBMITTER: MARCY OGADO		
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<b>DATE SIGNED:</b> 10/17/2017		
Total Attachments: 4		
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source=3554US01-Assignment#page4.tif		

PATENT REEL: 043887 FRAME: 0369

Customer No.: 000042717

#### ASSIGNMENT

WHEREAS, we,

(1)	Yu-Tien Shen	of	Hsinchu, Taiwan 300-78, (R.O.C.)
(2)	Ya-Wen Yeh	of	Hsinchu, Taiwan 300-78, (R.O.C.)
(3)	Wei-Liang Lin	of	Hsinchu City, Taiwan, (R.O.C.)
(4)	Ya Hui Chang	of	Hsinchu City 300, Taiwan, (R.O.C.)
(5)	Yung-Sung Yen	of	New Taipei City 235, Taiwan, (R.O.C.)
(6)	Wci-Hao Wu	of	Hsinchu City 300, Taiwan, (R.O.C.)
(7)	Li-Te Lin	of	Hsinchu, Taiwan, (R.O.C.)
(8)	Ru-Gun Liu	of	Hsinchu County 302, Taiwan, (R.O.C.)
(9)	Kuei-Shun Chen	of	Hsinchu City 300, Taiwan, (R.O.C.)

have invented certain improvements in

#### PATTERN FIDELITY ENHANCEMENT

for which we have executed an application for Letters Patent of the United States of America,

X	of even date filed herewith; and					
	filed or 08/29/2017 and assigned application number 15/689,172 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 Co., Ltd., ("TSMC"), 8, Li-Hsin Rd. 6, Hsinchu Science Park, Hsinchu, Taiwan 300-78, 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

Customer No.: 000042717

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.

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Dated: 2010. 09/05

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