

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT																				
NATURE OF CONVEYANCE:	Corrective Assignment to correct the Assignors previously recorded on Reel 030827 Frame 0628. Assignor(s) hereby confirms the Assignment of Assignors Entire Interest.																				
CONVEYING PARTY DATA																					
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CORRESPONDENCE DATA																					
Fax Number:	2127557306																				
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																					
Phone:	212-326-3939																				
Email:	erosenfelder@JonesDay.com																				
Correspondent Name:	Jones Day																				
Address Line 1:	222 East 41st Street																				

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Address Line 4: New York, NEW YORK 10017

ATTORNEY DOCKET NUMBER: 181877-625013

NAME OF SUBMITTER: Matthew W. Johnson

Signature: /Matthew W. Johnson/

Date: 08/01/2013

Total Attachments: 3  
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Address Line 1:	222 EAST 41ST ST																				
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JOINT

ASSIGNMENT

WHEREAS, WE, CHENG-TUNG LIN, TENG-CHUN TSAI, LI-TING WANG, CHI-YUAN CHEN, HONG-MAO LEE, HUI-CHENG CHANG, WEI-JUNG LIN, BING-HUNG CHEN and CHIA-HAN LAI citizen of the Republic of China, having the mailing addresses listed as below.

CHENG-TUNG LIN having a mailing address of 5F., No.6, Alley 39, Lane 152, Sec. 2, Jhongsing Rd., Jhudong Township, Hsinchu County 310, Taiwan residing at Hsinchu County, Taiwan;

TENG-CHUN TSAI having a mailing address of 11 F No.188, Guanxin W. St., East Dist., Hsinchu City, Taiwan residing at Hsinchu City, Taiwan;

LI-TING WANG having a mailing address of 17, Lane 81, Juangjing Rd., Tainan 701, Taiwan residing at Tainan, Taiwan;

CHI-YUAN CHEN having a mailing address of 8F., No.19, Jinshan 26th St., East Dist., Hsinchu City 300, Taiwan residing at Hsinchu City, Taiwan;

HONG-MAO LEE having a mailing address of 3F., No.9, Ln. 162, Minxiang St., East Dist., Hsinchu City 300, Taiwan residing at Hsinchu City, Taiwan;

HUI-CHENG CHANG having a mailing address of No.11, Ln. 220, Xinglong St., Guantian Dist., Tainan City 720, Taiwan residing at Tainan City, Taiwan;

WEI-JUNG LIN having a mailing address of No.98-3, Jinhua St., Da-an District, Taipei City 106, Taiwan residing at Taipei Taiwan;

BING-HUNG CHEN having a mailing address of 10F-1, No.65, Ho-Ping Street, San-Xia Town, New Taipei City, Taiwan residing at New Taipei City, Taiwan;

CHIA-HAN LAI having a mailing address of 9F., No.113, Jiafeng 1st St., Zhubei City, Hsinchu County 302, Taiwan residing at Hsinchu County 302, Taiwan,

ASSIGNORS, are the inventors of the invention in "Systems and Methods for Reducing Contact Resistivity of Semiconductor Devices" for which we have executed an application for a Patent of the United States

- which is executed on  even date herewith or  [DATE]
- which is identified by Jones Day docket no. xxxxx-xxxx-xxx
- which was filed on July \_\_, 2013, Application No. xx/xxx,xxx
- We hereby authorize and request attorney(s) at Jones Day, to insert here in parentheses (Application number \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

and WHEREAS, Taiwan Semiconductor Manufacturing Company Limited, a corporation organized and existing under the laws of Republic of China, and having an office for the transaction of business at No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu, Taiwan, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree 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 the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date July 11, 2013 Cheng-Tung Lin L.S.  
CHENG-TUNG LIN

Date July 11, 2013 Teng-Chun Tsai L.S.  
TENG-CHUN TSAI

Date July 11, 2013 Li-Ting Wang L.S.  
LI-TING WANG

Date July 11, 2013 CHI-TUAN CHEN L.S.  
CHI-YUAN CHEN

Date July 11, 2013 Hong-Mao Lee L.S.  
HONG-MAO LEE

Date July 11, 2013 Hui-Cheng Chang L.S.  
HUI-CHENG CHANG

Date July 11, 2013 Wei-Jung Lin L.S.  
WEI-JUNG LIN

Date July 11, 2013 Bing-Hung Chen L.S.  
BING-HUNG CHEN

Date July 11, 2013 Chia-Han Lai L.S.  
CHIA-HAN LAI