PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YA-LIEN LEE	06/03/2014
HUNG-WEN SU	06/04/2014
YU-HUNG LIN	05/28/2014
KUEI-PIN LEE	03/06/2014
YU-MIN CHANG	05/29/2014

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:	14286859		

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.

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ATTORNEY DOCKET NUMBER:	2012-0683-CIP/24061.2908
NAME OF SUBMITTER:	LYDIA EPPS-HILLIARD
SIGNATURE:	/LYDIA EPPS-HILLIARD/
DATE SIGNED:	08/04/2014

Total Attachments: 3

REEL: 033456 FRAME: 0967 502920335

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PATENT REEL: 033456 FRAME: 0968

Docket No.: 2012-0683-CIP/24061.2908

Customer No.: 42717

ASSIGNMENT

(1)	Ya-Lien Lee	of	No. 8, Alley. 19, Lane 80, Songcui Road Baoshan Township, Hsinchu County 308 Taiwan, R.O.C.
(2)	Hung-Wen Su	of	No. 190-2, Guangming 9th Road, Jhubei City Hsinchu County 302, Taiwan, R.O.C.
(3)	Yu-Hung Lin	of	No. 279, Section 2, Qinghai Road, Xitun District Taichung City 407, Taiwan, R.O.C.
(4)	Kuei-Pin Lee	of	11F1, No. 156, Minyou Street, Linkou District New Taipei City 244, Taiwan, R.O.C.
(5)	Yu-Min Chang	of	4F3, No. 67, Gaocui Road, East District Hsinchu City 300, Taiwan, R.O.C.

have invented certain improvements in

DEVICE AND METHOD FOR REDUCING CONTACT RESISTANCE OF A METAL

for which we have filed an application for Letters Patent of the United States of America on May 23, 2014, as U.S. Serial No. 14/286,859; 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 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.

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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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Inventor Name:	Ya-Lien Lee			
Residence Address:	No. 8, Alley. 19, Lane 80, Songcui Road, Baoshan Township Hsinchu County 308, Taiwan, R.O.C.			
Dated: >014/0	6103	ya-lien Lec		
	Inventor Signature			
Inventor Name:	Hung-Wen Su			
Residence Address:	No. 190-2, Guangming 9th Road, Jhubei City Hsinchu County 302, Taiwan, R.O.C.			
Dated: 2014, 6	4	Inventor Signature		
		Inventor Signature		
Inventor Name:	Yu-Hung Lin			
Residence Address:	No. 279, Section 2, Qinghai Ro Taichung City 407, Taiwan, R.			
Dated: Teldw	t-	Inventor Signature		
Dated: 10-14-	05.38	Inventor Signature		
Inventor Name:	Kuei-Pin Lee			
Residence Address:	11F1, No. 156, Minyou Street, Linkou District New Taipei City 244, Taiwan, R.O.C.			
Dated:	,, 0}	Kuei - Pin Lee Inventor Signature		
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Customer No.: 42717

Inventor Name:

Yu-Min Chang

Residence Address:

4F.-3, No. 67, Gaocui Road, East District

Hsinchu City 300, Taiwan, R.O.C.

Dated: 2014. 5. 29

Inventor Signature

R-2908 - Updated Assignment

RECORDED: 08/04/2014

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PATENT REEL: 033456 FRAME: 0971