PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YI-FAN CHEN	10/23/2013
TUNG-HENG HSIEH	10/23/2013
CHIN-SHAN HOU	10/23/2013
YU-BEY WU	10/23/2013

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:	15188753

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 2013-1056/24061.2651US02		
NAME OF SUBMITTER:	YILUN WANG	
SIGNATURE: /Yilun Wang/		
DATE SIGNED:	01/23/2018	

Total Attachments: 2

PATENT REEL: 044696 FRAME: 0359 source=2651US02 - Assignment#page1.tif source=2651US02 - Assignment#page2.tif

> PATENT REEL: 044696 FRAME: 0360

Docket No.: 2013-1056/24061.2651

Customer No.: 000042717

ASSIGNMENT

WHEREAS, w	e,
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(1)	Yi-Fan Chen	of	2F, Number 13-1, Xin wang Lane Zhongzheng Road, Xinzhuang District New Taipei City 242, Taiwan, R.O.C.
(2)	Tung-Heng Hsieh	of	Number 22, Lane 11, Jinfu Street Zhudong Town, Hsinchu County 310 Taiwan, R.O.C.
(3)	Chin-Shan Hou	of	31, 15F-2, Chien-Chung First Road Hsin-Chu City, 300, Taiwan, R.O.C.
(4)	Yu-Bey Wu	of	8F., Number 2-1, Alley 17, Lane 335 Section 1, Guangfu Road, East District Hsinchu City 300, Taiwan, R.O.C.

have invented certain improvements in

METHOD AND APPARATUS FOR INTEGRATED CIRCUIT LAYOUT

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

	of even date filed herewith; and
X	filed on November 15, 2013, and assigned application number 14/081,615; 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.

Inventor Name:	Yi-Fan Chen	
Residence Address:	2F, Number 13-1, Xin wang La New Taipei City 242, Taiwan, I	ne, Zhongzheng Road, Xinzhuang District R.O.C
Dated: אובן לאר בין לאר	'γ}	Y7-Tan Uun Inventor Signature
Inventor Name:	Tung-Heng Hsieh	
Residence Address:	Number 22, Lane 11, Jinfu Stre Taiwan, R.O.C.	et, Zhudong Town, Hsinchu County 310
Dated: 2013 ()		Tung Hone Hisnel
Inventor Name:	Chin-Shan Hou	
Residence Address:	31, 15F-2, Chien-Chung Firs Hsin-Chu City, 300, Taiwan,	
Dated: >0/3, 16	, 23	Chin-Shaull Inventor Signature
Inventor Name:	Yu-Bey Wu	
Residence Address:	8F., Number 2-1, Alley 17, Lan- Hsinchu City 300, Taiwan, R.O	e 335, Section 1, Guangfu Road, East Distric .C.
Dated: 2013, 1	0.23	YB Wu
		Inventor Signature

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RECORDED: 03/28/2018

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