

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>CHI-CHENG TSAI</td> <td>10/23/2013</td> </tr> <tr> <td>HUNG-CHI WU</td> <td>10/23/2013</td> </tr> <tr> <td>TSUNG-CHUAN LEE</td> <td>10/23/2013</td> </tr> <tr> <td>CHUNG-HSIEN LIN</td> <td>10/23/2013</td> </tr> </tbody> </table>		Name	Execution Date	CHI-CHENG TSAI	10/23/2013	HUNG-CHI WU	10/23/2013	TSUNG-CHUAN LEE	10/23/2013	CHUNG-HSIEN LIN	10/23/2013		
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<table border="1"> <tr> <td>Name:</td> <td>TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.</td> </tr> <tr> <td>Street Address:</td> <td>NO.8, LI-HSIN ROAD. 6</td> </tr> <tr> <td>Internal Address:</td> <td>SCIENCE-BASED INDUSTRIAL PARK</td> </tr> <tr> <td>City:</td> <td>HSIN-CHU</td> </tr> <tr> <td>State/Country:</td> <td>TAIWAN</td> </tr> <tr> <td>Postal Code:</td> <td>300-77</td> </tr> </table>		Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	Street Address:	NO.8, LI-HSIN ROAD. 6	Internal Address:	SCIENCE-BASED INDUSTRIAL PARK	City:	HSIN-CHU	State/Country:	TAIWAN	Postal Code:	300-77
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CORRESPONDENCE DATA													
<p>Fax Number: (703)205-8050</p> <p>Phone: (703) 205-8000</p> <p>Email: mailroom@bskb.com, brian.olive@bskb.com</p> <p><i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i></p> <p>Correspondent Name: BIRCH, STEWART, KOLASCH &amp; BIRCH, LLP</p> <p>Address Line 1: P.O. BOX 747</p> <p>Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747</p>													
ATTORNEY DOCKET NUMBER:	0941-2838PUS1												
NAME OF SUBMITTER:	BRIAN OLIVE												

Signature:	/brian olive/
Date:	11/27/2013
Total Attachments: 2 source=2013-11-27_Assignment_0941-2838PUS1#page1.tif source=2013-11-27_Assignment_0941-2838PUS1#page2.tif	

## ASSIGNMENT

WHEREAS, Chi-Cheng TSAI, Hung-Chi WU, Tsung-Chuan LEE, and Chung-Hsien LIN hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: MECHANISMS FOR PERFORMING A PHOTOLITHOGRAPHY PROCESS

Filed: October 30, 2013 Serial No. 14/067,167  
Executed on: October 23, 2013

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. of No.8, Li-Hsin Road. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C. hereinafter referred to as ASSIGNEES, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

## ASSIGNMENT

Date 10/23 "13	Name: Chi-Cheng TSAI <i>Chi-Cheng Tsai</i>	(Last name: TSAI)
Date 10/23 "13	Name: Hung-Chi WU <i>Hung-chi WU</i>	(Last name: WU)
Date 10/23 "13	Name: Tsung-Chuan LEE <i>Tsung-Chuan Lee</i>	(Last name: LEE)
Date 10/23 "13	Name: Chung-Hsien LIN <i>Chung-Hsien Lin</i>	(Last name: LIN)