

## 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>MIN-HAO HONG</td> <td>11/12/2013</td> </tr> <tr> <td>SHIU-KO JANGJIAN</td> <td>01/21/2014</td> </tr> <tr> <td>CHIH-TSUNG LEE</td> <td>11/15/2013</td> </tr> <tr> <td>MIAO-CHENG LIAO</td> <td>11/12/2013</td> </tr> </tbody> </table>		Name	Execution Date	MIN-HAO HONG	11/12/2013	SHIU-KO JANGJIAN	01/21/2014	CHIH-TSUNG LEE	11/15/2013	MIAO-CHENG LIAO	11/12/2013		
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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:	0941-2853PUS1												
NAME OF SUBMITTER:	BRIAN OLIVE												

Signature:	/brian olive/
Date:	02/12/2014
<b>Total Attachments: 4</b> source=2014-02-12_Assignment_0941-2853PUS1#page1.tif source=2014-02-12_Assignment_0941-2853PUS1#page2.tif source=2014-02-12_Assignment_0941-2853PUS1#page3.tif source=2014-02-12_Assignment_0941-2853PUS1#page4.tif	

## ASSIGNMENT

WHEREAS, Min-Hao HONG, Shiu-Ko JANGJIAN, Chih-Tsung LEE, and Miao-Cheng LIAO 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 FORMING SEMICONDUCTOR DEVICE HAVING STABLE DISLOCATION PROFILE**

Filed: November 14, 2013

Serial No. 14/080,220

Executed on: November 12, 2013; November 15, 2013; January 21, 2014

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 Name: Min-Hao HONG (Last name: HONG)

*Jan. 21, 2014* *Jang Jian Shiu ko.*  
\_\_\_\_\_  
Date Name: Shiu-Ko JANGJIAN (Last name: JANGJIAN)

\_\_\_\_\_  
Date Name: Chih-Tsung LEE (Last name: LEE)

\_\_\_\_\_  
Date Name: Miao-Cheng LIAO (Last name: LIAO)

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## ASSIGNMENT

2013/11/12

Date

Min Hao Hong

Name: Min-Hao HONG

(Last name: HONG)

2013/11/12

Date

Jang Jia Shiu

Name: Shiu (Ko) JANGJIAN

(Last name: JANGJIAN)

2013/11/15

Date

Chih-Tsung Lee

Name: Chih-Tsung LEE

(Last name: LEE)

2013/11/12

Date

Miao-Cheng Liao

Name: Miao-Cheng LIAO

(Last name: LIAO)