

PATENT ASSIGNMENT

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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>Hung-Chin Chung</td> <td>04/08/2013</td> </tr> <tr> <td>Shiang-Rung Tsai</td> <td>04/08/2013</td> </tr> <tr> <td>Hsien-Ming Lee</td> <td>04/08/2013</td> </tr> <tr> <td>Cheng-Lung Hung</td> <td>04/09/2013</td> </tr> <tr> <td>Hsiao-Kuan Wei</td> <td>04/08/2013</td> </tr> </tbody> </table>		Name	Execution Date	Hung-Chin Chung	04/08/2013	Shiang-Rung Tsai	04/08/2013	Hsien-Ming Lee	04/08/2013	Cheng-Lung Hung	04/09/2013	Hsiao-Kuan Wei	04/08/2013
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<table border="1"> <tr> <td>Name:</td> <td>Taiwan Semiconductor Manufacturing Company, Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>No. 8, Li-Hsin Rd. 6, 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 Company, Ltd.	Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park	City:	Hsin-Chu	State/Country:	TAIWAN	Postal Code:	300-77		
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CORRESPONDENCE DATA													
<p>Fax Number: 2142000853 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 214-651-5000 Email: ipdocketing@haynesboone.com Correspondent Name: HAYNES AND BOONE, LLP IP Section Address Line 1: 2323 Victory Avenue Address Line 2: Suite 700 Address Line 4: Dallas, TEXAS 75219</p>													
ATTORNEY DOCKET NUMBER:	24061.2443												
NAME OF SUBMITTER:	David M. O'Dell												

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Signature:	/David M. O'Dell/
Date:	04/26/2013
Total Attachments: 3 source=2443_Assignment#page1.tif source=2443_Assignment#page2.tif source=2443_Assignment#page3.tif	

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|------------------|----|---|
| (1) | Hung-Chin Chung | of | No. 21, Ln. 95, Zhongyong Road
Pingzhen City, Taoyuan County
Taiwan R.O.C. |
| (2) | Shiang-Rung Tsai | of | 5F., No. 176, Guandong Road
East District, Hsinchu City, Taiwan R.O.C. |
| (3) | Hsien-Ming Lee | of | No. 260, Shengyao E. Road
Datsuen Shiang, Changhua 51541
Taiwan, R.O.C. |
| (4) | Cheng-Lung Hung | of | No. 14, Lane 443, Minghu Road
East District
Hsinchu City 300, Taiwan R.O.C. |
| (5) | Hsiao-Kuan Wei | of | No. 1-5, Datong Road, Longtan Township
Taoyuan County 325, Taiwan R.O.C. |

have invented certain improvements in

METAL GATE STRUCTURE WITH DEVICE GAIN AND YIELD IMPROVEMENT

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 April 26, 2013, and assigned application number 13/871,555; 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

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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.

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: Hung-Chin Chung

Residence Address: No.21, Ln. 95, Zhongyong Road, Pingzhen City
Taoyuan County, Taiwan R.O.C.

Dated: Apr. 8, 2013

Hung-Chin Chung
Inventor Signature

Inventor Name: Shiang-Rung Tsai

Residence Address: 5F., No.176, Guandong Road, East District
Hsinchu City, Taiwan R.O.C.

Dated: Apr. 8, 2013

Shiang-Rung Tsai
Inventor Signature

Inventor Name: Hsien-Ming Lee

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Taiwan, R.O.C.

Dated: Apr. 8, 2013

Hsien-Ming Lee
Inventor Signature

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Inventor Name: Cheng-Lung Hung

Residence Address: No.14, Lane 443, Minghu Road, East District
Hsinchu City 300, Taiwan R.O.C.

Dated: Apr. 9. 2013

Cheng-Lung Hung
Inventor Signature

Inventor Name: Hsiao-Kuan Wei

Residence Address: No.1-5, Datong Road, Longtan Township, Taoyuan County 325
Taiwan R.O.C.

Dated: Apr. 8. 2013

Hsiao-Kuan Wei
Inventor Signature