

## 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>Hsueh-Shih Fan</td> <td>07/01/2013</td> </tr> <tr> <td>Sun-Jay Chang</td> <td>07/01/2013</td> </tr> <tr> <td>Chia-Hsin Hu</td> <td>07/01/2013</td> </tr> <tr> <td>Min-Chang Liang</td> <td>07/01/2013</td> </tr> <tr> <td>Shien-Yang Wu</td> <td>07/01/2013</td> </tr> <tr> <td>Wen-Hsing Hsieh</td> <td>07/01/2013</td> </tr> <tr> <td>Ching-Fang Huang</td> <td>07/01/2013</td> </tr> </tbody> </table>		Name	Execution Date	Hsueh-Shih Fan	07/01/2013	Sun-Jay Chang	07/01/2013	Chia-Hsin Hu	07/01/2013	Min-Chang Liang	07/01/2013	Shien-Yang Wu	07/01/2013	Wen-Hsing Hsieh	07/01/2013	Ching-Fang Huang	07/01/2013
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<table border="1"> <tr> <td>Name:</td> <td>Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC")</td> </tr> <tr> <td>Street Address:</td> <td>No. 8, Li-Hsin Rd. 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 Company, Ltd., ("TSMC")	Street Address:	No. 8, Li-Hsin Rd. 6	Internal Address:	Science-Based Industrial Park	City:	Hsin-Chu	State/Country:	TAIWAN	Postal Code:	300-77				
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CORRESPONDENCE DATA																	
Fax Number:	2142000853																
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
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ATTORNEY DOCKET NUMBER:	2012-0920 / 24061.2442
NAME OF SUBMITTER:	David M. O'Dell
Signature:	/David M. O'Dell/
Date:	07/25/2013
Total Attachments: 3 source=24061_2442_Assignment#page1.tif source=24061_2442_Assignment#page2.tif source=24061_2442_Assignment#page3.tif	

Docket No.: 2012-0920 / 24061.2442  
Customer No.: 42717

### ASSIGNMENT

WHEREAS, we,

- |     |                  |    |   |
|-----|------------------|----|---|
| (1) | Hsueh-Shih Fan   | of | Room 2, 8F., No. 10, Minguang Road<br>Hsinchu City, 300, Taiwan, R.O.C.                         |
| (2) | Sun-Jay Chang    | of | 18F.-5, No. 213, Guansin Road, East District<br>Hsinchu City, 30072, Taiwan, R.O.C.             |
| (3) | Chia-Hsin Hu     | of | No. 80, Tainsiang Road<br>Changhua City, Changhua County, Taiwan R.O.C.                         |
| (4) | Min-Chang Liang  | of | No. 20, Alley 25, Lane 314, Ease College Road<br>Zhu-Dong Town, Hsin-Chu County, Taiwan, R.O.C. |
| (5) | Shien-Yang Wu    | of | No. 327, SyueFu East Road<br>Jhudong Town, Hsin-Chu County, Taiwan, R.O.C.                      |
| (6) | Wen-Hsing Hsieh  | of | 24F.-11, No.188, Guanxin Road, East District<br>Hsinchu City 300, Taiwan R.O.C.                 |
| (7) | Ching-Fang Huang | of | 7F, No. 70, Jin-Hua Street, Da-An District<br>Taipei, Taiwan 106, R.O.C.                        |

have invented certain improvements in

### HIGH EFFICIENCY FINFET DIODE

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

  X   of even date filed herewith; and  
       filed on        and assigned application number       ; 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, 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

Docket No.: 2012-0920 / 24061.2442  
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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.

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: Hsueh-Shih Fan

Residence Address: Room 2, 8F., No. 10, Minquan Road  
Hsinchu City, 300, Taiwan, R.O.C.

Dated: 2013.7.1

Hsueh-Shih Fan  
Inventor Signature

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Dated: 2013/7/1

Sun-Jay Chang  
Inventor Signature

Inventor Name: Chia-Hsin Hu

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Changhua City, Changhua County, Taiwan R.O.C.

Dated: 2013.7.1

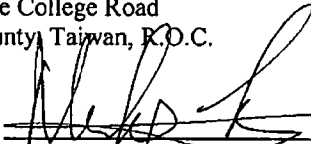
Chia-Hsin Hu  
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Inventor Name: Ming-Chang Liang

Residence Address: No. 20, Alley 25, Lane 314, Ease College Road  
Zhu-Dong Town, Hsin-Chu County, Taiwan, R.O.C.

Dated: 7/1/2013

  
Inventor Signature

Inventor Name: Shien-Yang Wu

Residence Address: No. 327, SyueFu East Road  
Jhudong Town, Hsin-Chu County, Taiwan, R.O.C.

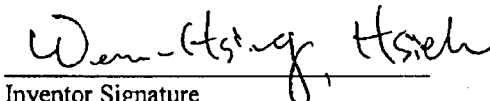
Dated: 7/1/2013

  
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Dated: 7/1/2013

  
Inventor Signature

Inventor Name: Ching-Fang Huang

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Dated: 7/1/2013

  
Inventor Signature