

# PATENT ASSIGNMENT

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT																		
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT																		
<b>CONVEYING PARTY DATA</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr><td>Hsin-Ting Huang</td><td>08/11/2011</td></tr> <tr><td>Jung-Huei Peng</td><td>08/11/2011</td></tr> <tr><td>Shang-Ying Tsai</td><td>08/11/2011</td></tr> <tr><td>Yao-Te Huang</td><td>08/11/2011</td></tr> <tr><td>Ming-Tung Wu</td><td>08/11/2011</td></tr> <tr><td>Ping-Yin Liu</td><td>08/11/2011</td></tr> <tr><td>Xin-Hua Huang</td><td>08/11/2011</td></tr> <tr><td>Yuan-Chih Hsieh</td><td>08/11/2011</td></tr> </tbody> </table>		Name	Execution Date	Hsin-Ting Huang	08/11/2011	Jung-Huei Peng	08/11/2011	Shang-Ying Tsai	08/11/2011	Yao-Te Huang	08/11/2011	Ming-Tung Wu	08/11/2011	Ping-Yin Liu	08/11/2011	Xin-Hua Huang	08/11/2011	Yuan-Chih Hsieh	08/11/2011
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<b>RECEIVING PARTY DATA</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;"><b>Name:</b></td><td>Taiwan Semiconductor Manufacturing Company, Ltd.</td></tr> <tr><td><b>Street Address:</b></td><td>No. 8, Li-Hsin Rd. 6</td></tr> <tr><td><b>Internal Address:</b></td><td>Science-Based Industrial Park</td></tr> <tr><td><b>City:</b></td><td>Hsin-Chu</td></tr> <tr><td><b>State/Country:</b></td><td>TAIWAN</td></tr> <tr><td><b>Postal Code:</b></td><td>300-77</td></tr> </table>		<b>Name:</b>	Taiwan Semiconductor Manufacturing Company, Ltd.	<b>Street Address:</b>	No. 8, Li-Hsin Rd. 6	<b>Internal Address:</b>	Science-Based Industrial Park	<b>City:</b>	Hsin-Chu	<b>State/Country:</b>	TAIWAN	<b>Postal Code:</b>	300-77						
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<b>PROPERTY NUMBERS Total: 1</b>																			
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<b>CORRESPONDENCE DATA</b>																			
<p>Fax Number: (214)200-0853</p> <p>Phone: 214-651-5000</p> <p>Email: ipdocketing@haynesboone.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Haynes and Boone LLP</p> <p>Address Line 1: 2323 Victory Avenue</p> <p>Address Line 2: Suite 700</p>																			

OP \$40.00 13206014

**501700475**

**PATENT**  
**REEL: 027109 FRAME: 0773**

Address Line 4: Dallas, TEXAS 75219

ATTORNEY DOCKET NUMBER:

24061.1889/2011-0451

NAME OF SUBMITTER:

David M. O'Dell

Total Attachments: 4

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**ASSIGNMENT**

WHEREAS, I

- |     |                 |    |  |
|-----|-----------------|----|--|
| (1) | Hsin-Ting Huang | of | No.4, Xiwei, Neighborhood 2, Bailu Vil<br>Bade City, Taoyuan County 33455, Taiwan (R.O.C.)     |
| (2) | Jung-Huei Peng  | of | 7F-1, No.6, Zihciang 6th St,<br>Jhubei City, Hsinchu Hsien, Taiwan, (R.O.C.)                   |
| (3) | Shang-Ying Tsai | of | No.110, Longjiang Rd.<br>Pingzhen City, Taoyuan County 324, Taiwan (R.O.C.)                    |
| (4) | Yao-Te Huang    | of | 10F.-3, No.419-3, Sec. 2, Gongdao 5th Rd.,<br>East District, Hsinchu City 300, Taiwan (R.O.C.) |
| (5) | Ming-Tung Wu    | of | 12F., No.117, Ln. 19, Guanxin Rd.<br>East Dist., Hsinchu City 300, Taiwan (R.O.C.)             |
| (6) | Ping-Yin Liu    | of | 3F., No. 7, Bao-an Rd.<br>Yonghe City, Taipei County 234, Taiwan (R.O.C.)                      |
| (7) | Xin-Hua Huang   | of | No. 276, Zhonggong Rd.<br>Xihu Township, Changhua County 514, Taiwan (R.O.C.)                  |
| (8) | Yuan-Chih Hsieh | of | 4F., No.12, Lane 1007, Daxue Rd.<br>Hsinchu City 300, Taiwan (R.O.C.)                          |

have invented certain improvements in

**MEMS DEVICE AND METHOD OF FORMATION THEREOF**

for which we have executed an application for Letters Patent of the United States of America on August 9, 2011 as U.S. Serial No. 13/206,014 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.

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.

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Inventor Name: Hsin-Ting Huang

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Bade City, Taoyuan County 33455, Taiwan (R.O.C.)

Dated: ✓ 2011.8.11

✓ Hsin-Ting Huang  
Inventor Signature

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Inventor Name: Jung-Huei Peng

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Jhubei City, Hsinchu Hsien, Taiwan, (R.O.C.)

Dated: ✓ 2011.8.11

✓ Jung-Huei Peng  
Inventor Signature

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Pingzhen City, Taoyuan County 324, Taiwan (R.O.C.)

Dated: ✓ 2011.08.11

✓ Shang-Ying Tsai  
Inventor Signature

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Inventor Name: Yao-Te Huang

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East District, Hsinchu City 300, Taiwan (R.O.C.)

Dated: ✓ ~~Yao~~ 2011.08.11

✓ Yao-Te Huang  
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Dated: ✓ Ming Tung Wu  
2011.08.11

✓ Ming Tung Wu  
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Dated: ✓ 2011.08.11.

✓ Ping-Yin Liu  
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Dated: ✓ 2011.08.11

✓ Xin-Hua Huang  
Inventor Signature

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Residence Address: 4F., No.12, Lane 1007, Daxue Rd.  
Hsinchu City 300, Taiwan (R.O.C.)

Dated: ✓ 2011.08.11

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