

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Su-Horng Lin</td> <td>01/04/2012</td> </tr> <tr> <td>Lin-Jung Wu</td> <td>01/04/2012</td> </tr> <tr> <td>Chi-Ming Yang</td> <td>01/09/2012</td> </tr> <tr> <td>Chin-Hsiang Lin</td> <td>01/11/2012</td> </tr> </tbody> </table>		Name	Execution Date	Su-Horng Lin	01/04/2012	Lin-Jung Wu	01/04/2012	Chi-Ming Yang	01/09/2012	Chin-Hsiang Lin	01/11/2012		
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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</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.	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													
<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> <p>Address Line 4: Dallas, TEXAS 75219</p>													
ATTORNEY DOCKET NUMBER:	24061.1902/2011-0646												
NAME OF SUBMITTER:	David M. O'Dell												
<p>Total Attachments: 3</p> <p>source=1902Assignment#page1.tif</p> <p>source=1902Assignment#page2.tif</p> <p>source=1902Assignment#page3.tif</p>													

OP \$40.00 13343857

PATENT

### ASSIGNMENT

WHEREAS, we,

- (1) Su-Horng Lin of 13F.-1, No.10, Lane 107, Kesyueyuan Road  
Hsinchu City 300, Taiwan, R.O.C.
- (2) Lin-Jung Wu of No.13, Aly. 16, Ln. 32, Weisheng St.  
Miaoli City, Miaoli County 360, Taiwan, R.O.C.
- (3) Chi-Ming Yang of 4, Lane 67, Duan-Feng Road  
Hsinchu City 300, Taiwan, R.O.C.
- (4) Chin-Hsiang Lin of No. 37, Lane 393, Min-hu Road  
Hsinchu 300, Taiwan, R.O.C.

have invented certain improvements in

### METAL HARD MASK FABRICATION

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

  X   of even date filed herewith; and  
  XX  filed on 01/05/2012 and assigned application number 13/343,857; 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.

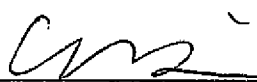
AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, 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: Su-Horng Lin

Residence Address: 13F.-1, No.10, Lane 107, Kesyueyuan Road  
Hsinchu City 300, Taiwan, R.O.C.

Dated: 2012.1.4

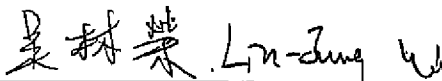
  
Inventor Signature

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Inventor Name: Lin-Jung Wu

Residence Address: No.13, Aly. 16, Ln. 32, Weisheng St.  
Miaoli City, Miaoli County 360, Taiwan, R.O.C.

Dated: 2012.1.4

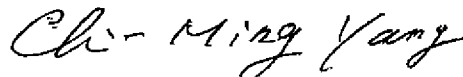
  
Inventor Signature

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Inventor Name: Chi-Ming Yang

Residence Address: 4, Lane 67, Duan-Feng Road  
Hsian-San District, 300-77, Taiwan R.O.C

Dated: 2012.1.9.

  
Inventor Signature

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Inventor Name: Chin-Hsiang Lin

Residence Address: No. 37, Lane 393, Min-hu Road  
Hsin-chu, 300, Taiwan, R.O.C.

Dated: 01.11.2012

  
Inventor Signature

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