

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>Shih-Ming Chang</td> <td>04/05/2012</td> </tr> <tr> <td>Ken-Hsien Hsieh</td> <td>04/05/2012</td> </tr> <tr> <td>Tsong-Hua Ou</td> <td>04/05/2012</td> </tr> <tr> <td>Ru-Gun Liu</td> <td>04/05/2012</td> </tr> <tr> <td>Fang-Yu Fan</td> <td>04/09/2012</td> </tr> <tr> <td>Yuan-Te Hou</td> <td>04/09/2012</td> </tr> </tbody> </table>		Name	Execution Date	Shih-Ming Chang	04/05/2012	Ken-Hsien Hsieh	04/05/2012	Tsong-Hua Ou	04/05/2012	Ru-Gun Liu	04/05/2012	Fang-Yu Fan	04/09/2012	Yuan-Te Hou	04/09/2012
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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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PROPERTY NUMBERS Total: 1															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13444648</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13444648										
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Application Number:	13444648														
CORRESPONDENCE DATA															
Fax Number:	(214)200-0853														
Phone:	214-651-5000														
Email:	ipdocketing@haynesboone.com														
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>															
Correspondent Name:	Haynes and Boone LLP														
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Address Line 2:	Suite 700														
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OP \$40.00 13444648

ATTORNEY DOCKET NUMBER:	24061.2040/2011-1317
NAME OF SUBMITTER:	David M. O'Dell
Total Attachments: 3 source=2040Assignment#page1.tif source=2040Assignment#page2.tif source=2040Assignment#page3.tif	

Docket No.: 2011-1317 / 24061.2040
Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|-----------------|----|--|
| (1) | Shih-Ming Chang | of | 11F., No. 7, Jiazheng 5th Street
Zhubei City, Hsinchu County 302, Taiwan R.O.C. |
| (2) | Ken-Hsien Hsieh | of | 5F., No. 49, Sec. 2, Roosevelt Road Da-an District
Taipei City 106, Taiwan R.O.C. |
| (3) | Tsong-Hua Ou | of | 4F., No. 76, Hualing Street, Shihlin District
Taipei City 111, Taiwan R.O.C. |
| (4) | Ru-Gun Liu | of | No. 9, Alley 19, Lane 452, Baoshan Road
Hsinchu City 300, Taiwan R.O.C. |
| (5) | Fang-Yu Fan | of | No. 24, Aly. 1, Ln. 366, Sec. 1, Zhongping Road
Hukou Township, Hsinchu County 303
Taiwan R.O.C. |
| (6) | Yuan-Te Hou | of | No. 16, Alley 3, Lane 61, Wuling Road,
North District
Hsinchu City 300, Taiwan R.O.C. |

have invented certain improvements in

A SEMICONDUCTOR DEVICE WITH SELF-ALIGNED INTERCONNECTS

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 04/11/2012 and assigned application number 13/444,648; 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

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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.

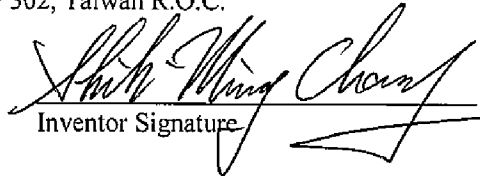
AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

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.

Inventor Name: Shih-Ming Chang

Residence Address: 11F., No. 7, Jiazheng 5th Street
Zhubei City, Hsinchu County 302, Taiwan R.O.C.

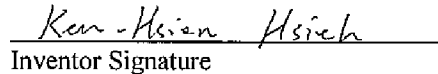
Dated: 2012-04-05


Inventor Signature

Inventor Name: Ken-Hsien Hsieh

Residence Address: 5F., No. 49, Sec. 2, Roosevelt Road Da-an District
Taipei City 106, Taiwan R.O.C.

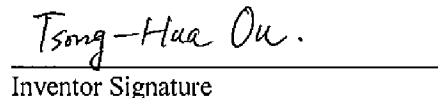
Dated: 2012-04-05


Inventor Signature

Inventor Name: Tsong-Hua Ou

Residence Address: 4F., No. 76, Hualing Street, Shihlin District
Taipei City 111, Taiwan R.O.C.

Dated: 2012-04-05


Inventor Signature

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Inventor Name: Ru-Gun Liu

Residence Address: No. 9, Alley 19, Lane 452, Baoshan Road
Hsinchu City 300, Taiwan R.O.C.

Dated: 5 Apr. 2012

Ru-Gun Liu
Inventor Signature

Inventor Name: Fang-Yu Fan

Residence Address: No. 24, Aly. 1, Ln. 366, Sec. 1, Zhongping Road
Hukou Township, Hsinchu County 303, Taiwan R.O.C.

Dated: 2012.04.09

Fang-Yu Fan
Inventor Signature

Inventor Name: Yuan-Te Hou

Residence Address: No. 16, Alley 3, Lane 61, Wuling Road, North District
Hsinchu City 300, Taiwan R.O.C.

Dated: Yuan 2012.04.09

Yuan-Te Hou
Inventor Signature