

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>Tien-I Bao</td> <td>01/15/2013</td> </tr> </tbody> </table>		Name	Execution Date	Tien-I Bao	01/15/2013
Name	Execution Date				
Tien-I Bao	01/15/2013				
RECEIVING PARTY DATA					
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.				
Street Address:	No. 8, Li-Hsin Road 6				
Internal Address:	Science-Based Industrial Park				
City:	Hsin-Chu				
State/Country:	TAIWAN				
Postal Code:	300-77				
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>13744781</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13744781
Property Type	Number				
Application Number:	13744781				
CORRESPONDENCE DATA					
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<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>					
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ATTORNEY DOCKET NUMBER:	24061.2293/2012-0845				
NAME OF SUBMITTER:	David M. O'Dell				
Total Attachments: 3 source=2293Assignment#page1.tif source=2293Assignment#page2.tif source=2293Assignment#page3.tif					

OP \$40.00 13744781

Docket No.: 2012-0845 / 24061.2293
Customer No.: 000042717

ASSIGNMENT

WHEREAS, we,

- (1) Hsin-Yen Huang of 1F, No.13, Ln. 45, Bo-ai Street
Yonghe City, Taipei County
Taiwan R.O.C.
- (2) Yu-Sheng Chang of 2F., No. 5, Aly. 26, Ln. 190, Sec. 7,
Zhongshan N. Rd., Shilin District
Taipei City 111, Taiwan R.O.C.
- (3) Hai-Ching Chen of 15F.-5, No.37, Jianzhong 1st Road
Hsinchu City, Taiwan R.O.C.
- (4) Tien-I Bao of 6F., No. 366, Sec. 4, Linghang N. Road
Dayuan Township, Taoyuan County 337
Taiwan R.O.C.

have invented certain improvements in

SEMICONDUCTOR INTEGRATED CIRCUIT AND FABRICATING THE SAME

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, 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

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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: Hsin-Yen Huang

Residence Address: 1F, No. 13, Ln. 45, Bo-ai Street
Yonghe City, Taipei County, Taiwan R.O.C.

Dated: 1/15/2013

Hsin-Yen Huang
Inventor Signature

Inventor Name: Yu-Sheng Chang

Residence Address: 2F., No. 5, Aly. 26, Ln. 190, Sec. 7, Zhongshan N. Rd., Shilin District
Taipei City 111, Taiwan R.O.C.

Dated: 1/15/2013

Yu-Sheng Chang
Inventor Signature

Inventor Name: Hai-Ching Chen

Residence Address: 15F.-5, No. 37, Jianzhong 1st Road
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Dated: 1/15/2013

Hai-Ching Chen
Inventor Signature

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Inventor Name: Tien-I Bao

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Dated: 2013.1.15

Tien-I Bao
Inventor Signature
