PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chia-Cheng Chang	03/07/2012
Chin-Min Huang	03/07/2012
Wei-Kuan Yu	03/07/2012
Cherng-Shyan Tsay	03/07/2012
Lai Chien Wen	03/07/2012
Hua-Tai Lin	03/07/2012

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13414183

CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Correspondent Name:	Haynes and Boone LLp
Address Line 1:	2323 Victory Avenue
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OP $40.00 13414183

ATTORNEY DOCKET NUMBER:	24061.2041/2011-1318
NAME OF SUBMITTER:	David M. O'Dell

Total Attachments: 3
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Docket No.: 2011-1318 / 24061.2041
Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1)	Chia-Cheng Chang	of	No. 22, Lane 147, Yuren Road, West District Chiayi City 600, Taiwan, R.O.C.
(2)	Chin-Min Huang	of	No. 21, Shuitou Lane, Jiahou Road, Waipu District Taichung City 438, Taiwan, R.O.C.
(3)	Wei-Kuan Yu	of	No. 14, Lane 48, Jiangong 1st Road, East District Hsinchu City 300, Taiwan, R.O.C
(4)	Cherng-Shyan Tsay	of	No. 42, Guanghua N. Road Toufen Township, Miaoli County 351, Taiwan, R.O.C.
(5)	Lai Chien Wen	of	6F-5, No. 247, Nioupu E. Road Hsinchu City 300, Taiwan, R.O.C.
(6)	Hua-Tai Lin	of	No. 26, Alley 10, Lane 194, Gaofeng Road Hsinchu City 300, Taiwan, R.O.C.

have invented certain improvements in

METHOD AND APPARATUS FOR ENHANCED OPTICAL PROXIMITY CORRECTION

for which we have executed an application for Letters Patent of the United States of America, filed on March 7, 2012 and assigned application number 13/414183; and

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.

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Inventor Name: Cherng-Shyan Tsay

Residence Address: No. 42, Guanghua N. Road
Toufen Township, Miaoli County 351, Taiwan, R.O.C.

Dated: _Cherng-Shyan Tsay_   _2012/03/07_
                                              Inventor Signature

Inventor Name: Lai Chien Wen

Residence Address: 6F-5, No. 247, Nioupu E. Road
Hsinchu City 300, Taiwan, R.O.C.

Dated: _0307 2012_   _Lai Chien Wen_
                                               Inventor Signature

Inventor Name: Hua-Tai Lin

Residence Address: No. 26, Alley 10, Lane 194, Gaofeng Road
Hsinchu City 300, Taiwan, R.O.C.

Dated: _03/07/2012_   _Hua Tai Lin_
                                               Inventor Signature

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: Chia-Cheng Chang

Residence Address: No. 22, Lane 147, Yuren Road, West District
                      Chiayi City 600, Taiwan, R.O.C.

Dated: _2012/03/07_   _Chia - Cheng Chang_
                                 Inventor Signature

Inventor Name: Chin-Min Huang

Residence Address: No. 21, Shuitou Lane, Jiahou Road, Waipu District
                      Taichung City 438, Taiwan, R.O.C.

Dated: _2012/03/07_   _Chin Min Huang_
                                 Inventor Signature

Inventor Name: Wei-Kuan Yu

Residence Address: No. 14, Lane 48, Jiangong 1st Road, East District
                      Hsinchu City 300, Taiwan, R.O.C.

Dated: _2012/03/07_   _Wei-Kuan Yu_
                                 Inventor Signature

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