

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>Hung-Chun Wang</td> <td>04/13/2012</td> </tr> <tr> <td>Ming-Hui Chih</td> <td>04/13/2012</td> </tr> <tr> <td>Cheng Kun Tsai</td> <td>04/13/2012</td> </tr> <tr> <td>Wen-Chun Huang</td> <td>04/13/2012</td> </tr> <tr> <td>Ru-Gun Liu</td> <td>04/13/2012</td> </tr> </tbody> </table>		Name	Execution Date	Hung-Chun Wang	04/13/2012	Ming-Hui Chih	04/13/2012	Cheng Kun Tsai	04/13/2012	Wen-Chun Huang	04/13/2012	Ru-Gun Liu	04/13/2012
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Wen-Chun Huang	04/13/2012												
Ru-Gun Liu	04/13/2012												
RECEIVING PARTY DATA													
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.												
Street Address:	No. 8, Li-Hsin Rd. 6, 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>13447857</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13447857								
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Application Number:	13447857												
CORRESPONDENCE DATA													
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Address Line 4:	Dallas, TEXAS 75219												
ATTORNEY DOCKET NUMBER:	24061.2131												
NAME OF SUBMITTER:	Rachel L.I. Davis												
Total Attachments: 3 source=2131Assignment#page1.tif source=2131Assignment#page2.tif source=2131Assignment#page3.tif													

OP \$40.00 13447857

PATENT

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|----------------|----|---|
| (1) | Hung-Chun Wang | of | 390, Chung-San Road, Ching-Shuei
Taichung, Taiwan R.O.C. |
| (2) | Ming-Hui Chih | of | 4F., No. 94, Lane 185, Zhongzheng Road
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Taiwan R.O.C. |
| (3) | Cheng KunTsai | of | 14F-1, No. 10, Lane 107, Kesyueyuan Rd.,
Hsinchu City 300, Taiwan R.O.C. |
| (4) | Wen-Chun Huang | of | No. 58, Zhong-Shan Road, Xi-Gang
Xi-Gang District, Tainan City
Taiwan 723, R.O.C. |
| (5) | Ru-Gun Liu | of | No.90, Chenggong 5th Street
Zhubei City, Hsinchu County 302,
Taiwan R.O.C. |

have invented certain improvements in

PATTERN CORRECTION WITH LOCATION EFFECT

for which we have filed an application for Letters Patent of the United States of America on April 16, 2012, and assigned application number 13/447,857; 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

Docket No.: 2012-1027 / 24061.2131
Customer No.: 000042717

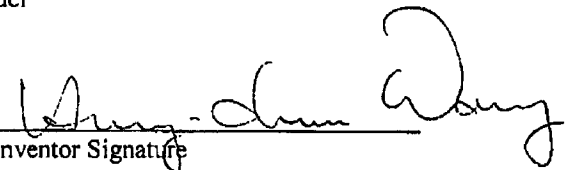
and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, 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.

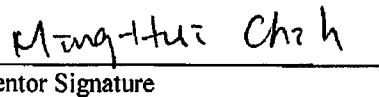
Inventor Name: Hung-Chun Wang
Residence Address: 390, Chung-San Road, Ching-Shuei
Taichung, Taiwan R.O.C.

Dated: 2012/4/13


Inventor Signature

Inventor Name: Ming-Hui Chih
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Luzhou City, Taipei County 247
Taiwan R.O.C.

Dated: Min 2012.04.13


Inventor Signature

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Customer No.: 000042717

Inventor Name: Cheng KunTsai

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Hsinchu City 300, Taiwan R.O.C.

Dated: 2012. 04. 13

Cheng Kun Tsai
Inventor Signature

Inventor Name: Wen-Chun Huang

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Dated: 04/13/2012

Wen-Chun Huang
Inventor Signature

Inventor Name: Ru-Gun Liu

Residence Address: No.90, Chenggong 5th Street
Zhubei City, Hsinchu County 302, Taiwan R.O.C.

Dated: 4/13. 2012

Ru-Gun Liu
Inventor Signature