

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Che-Hao Chang</td> <td>07/22/2009</td> </tr> <tr> <td>Cheng-Hao Hou</td> <td>07/22/2009</td> </tr> <tr> <td>Chen-Hua Yu</td> <td>07/22/2009</td> </tr> <tr> <td>Tai Bor Wu</td> <td>06/22/2009</td> </tr> </tbody> </table>		Name	Execution Date	Che-Hao Chang	07/22/2009	Cheng-Hao Hou	07/22/2009	Chen-Hua Yu	07/22/2009	Tai Bor Wu	06/22/2009
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CORRESPONDENCE DATA											
<p>Fax Number: (214)200-0853</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 9727398643</p> <p>Email: linda.ingram@haynesboone.com</p> <p>Correspondent Name: HAYNES AND BOONE, LLP IP Section</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:	2008-0286 / 24061.1132										
NAME OF SUBMITTER:	Liem T. Do										

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PATENT
REEL: 023171 FRAME: 0287

Total Attachments: 3

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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|---------------|----|---|
| (1) | Che-Hao Chang | of | 5F, No. 19, Lane 266, Sinjhuang Street, East District
Hsinchu City 30073, Taiwan, R.O.C. |
| (2) | Cheng-Hao Hou | of | No. 24-8, Lane 136, Zhonghe Road, North District
Hsinchu City 30073, Taiwan, R.O.C. |
| (3) | Chen-Hua Yu | of | No. 3, 38 Waterfront Road 2
Hsin-Chu, Taiwan, R.O.C. |
| (4) | Tai-Bor Wu | of | 3F, No. 46, Qingda Xiyuan, East District
Hsinchu City 30073, Taiwan, R.O.C. |

have invented certain improvements in

**METHOD OF FABRICATING A GATE DIELECTRIC
FOR HIGH-K METAL GATE DEVICES**

for which we have filed an application for Letters Patent of the United States of America on August 31, 2009, as U.S. Serial No. 12/550,767; 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 One Dollar (\$1.00) and other 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.

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Customer No.: 42717

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: Che-Hao Chang

Residence Address: 5F, No. 19, Lane 266, Sinjhuang Street, East District
Hsinchu City 30073, Taiwan, R.O.C.

Dated: 7/22/2009

Che-Hao Chang
Inventor Signature

Inventor Name: Cheng-Hao Hou

Residence Address: No. 24-8, Lane 136, Zhonghe Road, North District
Hsinchu City 30073, Taiwan, R.O.C.

Dated: 7/22/2009

Cheng-Hao Hou
Inventor Signature

Inventor Name: Chen-Hua Yu

Residence Address: No. 3, 38 Waterfront Road 2
Hsin-Chu, Taiwan R.O.C.

Dated: 7/22/09

Chen-Hua Yu
Inventor Signature

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Inventor Name: Tai Bor Wu

Residence Address: 3F, No. 46, Qingda Xiyuan, East District
Hsinchu City 30073, Taiwan, R.O.C.

Dated: June 22, 2009

Tai Bor Wu
Inventor Signature
