

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>Cheng-Lung Hung</td><td>10/09/2008</td></tr><tr><td>Yong-Tian Hou</td><td>10/09/2008</td></tr><tr><td>Keh-Chiang Ku</td><td>10/09/2008</td></tr><tr><td>Chien-Hao Huang</td><td>10/09/2008</td></tr></tbody></table>	Name	Execution Date	Cheng-Lung Hung	10/09/2008	Yong-Tian Hou	10/09/2008	Keh-Chiang Ku	10/09/2008	Chien-Hao Huang	10/09/2008	
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Keh-Chiang Ku	10/09/2008										
Chien-Hao Huang	10/09/2008										
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>13186656</td></tr></tbody></table>	Property Type	Number	Application Number:	13186656							
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CORRESPONDENCE DATA											
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ATTORNEY DOCKET NUMBER:	24061.1847										
NAME OF SUBMITTER:	Thomas W. Kelton										
Total Attachments: 3 source=1847Assignment#page1.tif source=1847Assignment#page2.tif source=1847Assignment#page3.tif											

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PATENT
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Docket No.: 2008-0472 / 24061.1072
Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|-----------------|----|--|
| (1) | Cheng-Lung Hung | of | No. 14, Lane 443, Minghu Road, East District
Hsinchu County 300, Taiwan, R.O.C. |
| (2) | Yong-Tian Hou | of | BLK #427, #04-192, Choa Chu Kang Ave., 4
Singapore 680427 |
| (3) | Keh-Chiang Ku | of | 5F, No. 168, Jianguo Road
Sindan City, Taipei County 231, Taiwan, R.O.C. |
| (4) | Chien-Hao Huang | of | 7F, No. 97, Sec. 2, Sanmin Road
Banciao City, Taipei County, Taiwan, R.O.C. |

have invented certain improvements in

IMPLANTATION METHOD FOR REDUCING THRESHOLD VOLTAGE FOR HIGH-K METAL GATE DEVICE

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 October 17, 2008 and assigned application no. 12/253,741 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.

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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: Cheng-Lung Hung

Residence Address: No. 14, Lane 443, Minghu Road, East District
Hsinchu County 300, Taiwan, R.O.C.

Dated: 2008/10/09

Cheng-Lung Hung
Inventor Signature

Inventor Name: Yong-Tian Hou

Residence Address: BLK #427, #04-192, Choa Chu Kang Ave., 4
Singapore 680427

Dated: 2008/10/09

Yong-Tian Hou
Inventor Signature

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Inventor Name: Keh-Chiang Ku

Residence Address: 5F, No. 168, Jianguo Road
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Dated: 2008.10.9

Keh-Chiang Ku
Inventor Signature

Inventor Name: Chien-Hao Huang

Residence Address: 7F, No. 97, Sec. 2, Sanmin Road East District
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Dated: 2008.10.9

Chien-Hao Huang
Inventor Signature