

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>Yuri Masuoka</td><td>04/17/2009</td></tr><tr><td>Huan-Tsung Huang</td><td>04/23/2009</td></tr></tbody></table>	Name	Execution Date	Yuri Masuoka	04/17/2009	Huan-Tsung Huang	04/23/2009							
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RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>Taiwan Semiconductor Manufacturing Company, Ltd.</td></tr><tr><td>Street Address:</td><td>No. 8, Li-Hsin Rd. 6</td></tr><tr><td>Internal Address:</td><td>Science-Based Industrial Park</td></tr><tr><td>City:</td><td>Hsin-Chu</td></tr><tr><td>State/Country:</td><td>TAIWAN</td></tr><tr><td>Postal Code:</td><td>300-77</td></tr></table>	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	
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PROPERTY NUMBERS Total: 1													
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Application Number:	13217442												
CORRESPONDENCE DATA													
Fax Number: (214)200-0853													
Phone: 214-651-5000													
Email: ipdocketing@haynesboone.com													
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name: Haynes and Boone LLP													
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Address Line 2: Suite 700													
Address Line 4: Dallas, TEXAS 75219													
ATTORNEY DOCKET NUMBER:	2008-0548-D/24061.1938												
NAME OF SUBMITTER:	David M. O'Dell												
Total Attachments: 4 source=1938Assignment#page1.tif source=1938Assignment#page2.tif source=1938Assignment#page3.tif source=1938Assignment#page4.tif													

OP \$40.00 13217442

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PATENT
REEL: 026931 FRAME: 0866

ASSIGNMENT

WHEREAS, we,

- (1) Yuri Masuoka of 15F, #126 Shengli 1st Road
Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
- (2) Huan-Tsung Huang of 6F, #59 Chenggong 1st Street
Hsinchu County, Taiwan, R.O.C.

have invented certain improvements in

TRANSISTOR PERFORMANCE IMPROVING
METHOD WITH METAL GATE

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 5-8-2009 and assigned application number 12/437,696; 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.

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,

Docket No.: 2008-0548 / 24061.1157
Customer No.: 42717

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: Yuri Masuoka

Residence Address: 15F, #126 Shengli 1st Road
Jhubel City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 17/4/2009


Inventor Signature

Inventor Name: Huan-Tsung Huang

Residence Address: 6F, #59 Chenggong 1st Street
Hsinchu County, Taiwan, R.O.C.

Dated: _____

Inventor Signature

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Residence Address: 15F, #126 Shengli 1st Road
Jhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: _____

Inventor Signature

Inventor Name: Huan-Tsung Huang

Residence Address: 6F, #59 Chenggong 1st Street
Hsinchu County, Taiwan, R.O.C.

Dated: ✓ Apr. 23, 2009


Inventor Signature