

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
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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: (512) 867-8458</p> <p>Email: Kim.Reyes@haynesboone.com</p> <p>Correspondent Name: Haynes and Boone, LLP</p> <p>Address Line 1: IP Section, 2323 Victory Avenue</p> <p>Address Line 2: Suite 700</p> <p>Address Line 4: Dallas, TEXAS 75219</p>															
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PATENT
REEL: 024721 FRAME: 0225

NAME OF SUBMITTER:

Bart A. Fisher

Total Attachments: 3

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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|------------------|----|---|
| (1) | Yu-Lien Huang | of | 3F, No. 123, Jhuangjing 3rd Road
Jhubei City, Hsinchu County 302, Taiwan, R.O.C. |
| (2) | Mao-Rong Yeh | of | 5F, No. 118, Zhong-Yi Road
Tao Yuan City, Taiwan, R.O.C. |
| (3) | Chun Hsiung Tsai | of | No. 7, Daxiang Road
Xinpu Township, Hsinchu County 305, Taiwan, R.O.C. |
| (4) | Tsung-Hung Lee | of | 13F-3, No. 275, Linsen Road, North District
Hsinchu City 300, Taiwan, R.O.C. |
| (5) | Da-Wen Lin | of | No. 32, Alley 2, Lane 173, Gaocui Road, East District
Hsinchu City 300, Taiwan, R.O.C. |
| (6) | Tsz-Mei Kwok | of | Apt, 9D, 128 Jin Shan Street
Hsinchu, Taiwan, R.O.C. |

have invented certain improvements in

HIGH SURFACE DOPANT CONCENTRATION SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING

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 July 21, 2010 and assigned application number 12/840,830; 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 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: Yu-Lien Huang

Residence Address: 3F, No. 123, Jhuangjing 3rd Road
Jhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 2010. 7. 14

Yu-Lien Huang
Inventor Signature

Inventor Name: Mao-Rong Yeh

Residence Address: 5F, No. 118, Zhong-Yi Road
Tao Yuan City, Taiwan, R.O.C.

Dated: 2010. 7. 14

Mao-Rong Yeh
Inventor Signature

Inventor Name: Chun Hsiung Tsai

Residence Address: No. 7, Daxiang Road
Xinpu Township, Hsinchu County 305, Taiwan, R.O.C.

2010. 7. 14
Dated: Chun Hsiung Tsai

Chun Hsiung Tsai
Inventor Signature

Inventor Name: Tsung-Hung Lee

Residence Address: 13F-3, No. 275, Linsen Road, North District
Hsinchu City 300, Taiwan, R.O.C.

Dated: 2010.7.14

Tsung-Hung Lee
Inventor Signature

Inventor Name: Da-Wen Lin

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Dated: 2010.7.15

Da-Wen Lin
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Inventor Name: Tsz-Mei Kwok

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Dated: 2010.7.14

Tsz-Mei Kwok
Inventor Signature