

PATENT ASSIGNMENT

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SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jeff J. Xu	06/25/2008
Chia-Ta Hsieh	06/26/2008
Chun-Pei Wu	06/26/2008
Chun-Hung Lee	06/30/2008

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Company, Ltd.
Street Address:	No. 8, Li-Hsin Road 6
City:	Hsin-Chu
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12172687

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:

24061.999

NAME OF SUBMITTER:

David M. O'Dell

Total Attachments: 3

PATENT

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REEL: 021234 FRAME: 0557

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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|---------------|----|--|
| (1) | Jeff J. Xu | of | No. 296-5, 14F, Guangming 6th Rd., E. Sec. 1
Jhubei City, Hsinchu County 310 County, Taiwan, R.O.C. |
| (2) | Chia-Ta Hsieh | of | No. 7, Lane 133, Tung-Feng Road
Tainan, Taiwan, R.O.C. |
| (3) | Chun-Pei Wu | of | No. 117, Yuanji Rd., Mingjian Township
Nantou County 551, Taiwan, R.O.C. |
| (4) | Chun-Hung Lee | of | 4F, No. 15, Lane 554, Guangming Rd., Zhudong Town
Hsinchu County 310, Taiwan, R.O.C. |

have invented certain improvements in

STORAGE NITRIDE ENCAPSULATION FOR NON-PLANAR SONOS NAND FLASH CHARGE RETENTION

for which we have executed an application for Letters Patent of the United States of America,

 of even date filed herewith; and
 X filed on July 14, 2008 and assigned application no. 12/172,687 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.

Docket No.: 2007-0830 (2008-0033) / 24061.999
Customer No.: 42717

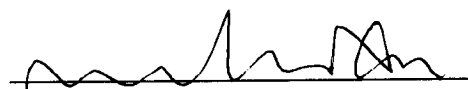
AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

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: Jeff J. Xu

Residence Address: No. 296-5, 14F, Guangming 6th Rd., E. Sec. 1
Jhubei City, Hsinchu County 310 County, Taiwan, R.O.C.

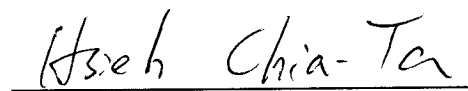
Dated: 6/25/2008


Inventor Signature

Inventor Name: Chia-Ta Hsieh

Residence Address: No. 7, Lane 133, Tung-Feng Road
Tainan, Taiwan, R.O.C.

Dated: 6/26/2008


Inventor Signature

Docket No.: 2007-0830 (2008-0033) / 24061.999
Customer No.: 42717

Inventor Name: Chun-Pei Wu

Residence Address: No. 117, Yuanji Rd., Mingjian Township
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Dated: 06/26/2008

Chun-Pei Wu
Inventor Signature

Inventor Name: Chun-Hung Lee

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Hsinchu County 310, Taiwan, R.O.C.

Dated: 06/20/2008

Chun-Hung Lee
Inventor Signature