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| SUBMISSION TYPE: | NEW ASSIGNMENT | |
|-----------------------|----------------|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT | |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| Ching-Yu Wang | 08/21/2006 |
| Weng-Jin Wu | 08/21/2006 |
| Henry Lo | 08/21/2006 |
| Jean Wang | 08/21/2006 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11552364 |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 24061.754

NAME OF SUBMITTER: Liem T. Do

PATENT

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REEL: 018429 FRAME: 0451

Total Attachments: 3 source=754Assignment#page1.tif source=754Assignment#page2.tif source=754Assignment#page3.tif

PATENT REEL: 018429 FRAME: 0452

Docket No.: 2004-0707 / 24061.754

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

| (1) | Ching-Ya WANG | of | 7F, No. 9, Jin-Sheng Road 20 Hsin-Chu, 300, Taiwan, R.O.C. |
|-----|---------------|----|-------------------------------------------------------------------|
| (2) | Weng-Jin WU | of | 2F, No. 3, Lane 271, Wuling Road Hsinchu City 300, Taiwan, R.O.C. |
| (3) | Henry LO | of | 7F-6, No. 39, Chien Chung Rd. I Hsinchu, Taiwan, R.O.C. |
| (4) | Jean WANG | of | 3F-4 University Road Hsin Chu, Taiwan, R.O.C. |

have invented certain improvements in

INTEGRATED ETCH AND SUPERCRITICAL CO₂ PROCESS AND CHAMBER DESIGN

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 October 24, 2006 and assigned application number 11/552,364; 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:

Ching-Ya WANG

Residence Address:

7F, No. 9, Jin-Sheng Road 20 Hsin-Chu, 300, Taiwan, R.O.C.

>006. 8, 2/

Ching- Ta Wang
Inventor Signature

Inventor Name:

...

Weng-Jin WU

Residence Address: 2F, No. 3, Lane 271, Waling Rd., Hsinchucity 300, Ta: wan, R.O. C.

2006 8.21

Weng - Jin Wa

Docket No.: 2004-0707 / 24061.754

Customer No.: 42717

Inventor Name:

Henry LO

Residence Address:

7F-6, No. 39, Chien Chung Rd. I

Hsinchu, Taiwan, R.O.C.

Dated:

8/21/66

Henry Lo

Inventor Name:

Jean WANG

Residence Address:

3F-4 University Road Hsin Chu, Taiwan, R.O.C.

Dated: 8/21/06

Inventor Signature

RECORDED: 10/24/2006

- 3 -

PATENTTOTAL P.07
REEL: 018429 FRAME: 0455