

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>															
ATTORNEY DOCKET NUMBER:	24061.1391														

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PATENT
REEL: 024175 FRAME: 0121

NAME OF SUBMITTER:

Bart A. Fisher

Total Attachments: 3

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Docket No.: 2009-0655 / 24061.1391
Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|-----------------|----|---|
| (1) | Ping Chieh Wu | of | 3F, No. 12, Alley 16, Lane 78, Mingyuan St.
Shulin City, Taipei County 238, Taiwan, R.O.C. |
| (2) | Chien-Hsun Chen | of | 4F, No. 21, Lane 251, Niupu E. Rd.
Xiangshan Dist., Hsinchu City 300, Taiwan, R.O.C. |
| (3) | Ru-Gun Liu | of | No. 9, Alley 19, Lane 452, Baoshan Rd.
Hsinchu City 300, Taiwan, R.O.C. |
| (4) | Wen-Chun Huang | of | 58, Zhong-Shan Rd., Xi-Gang Village
Xi-Gang Xiang, Tainan County, Taiwan, R.O.C. |
| (5) | Chih-Ming Lai | of | 3F, No. 2, Lane 15, Peiying St.
Hsinchu City 300, Taiwan, R.O.C. |
| (6) | Boren Luo | of | 5F, No. 157, Sec. 1, Jiafeng 2 nd St.
Zhubei City, Hsinchu County 302, Taiwan, R.O.C. |

have invented certain improvements in

A METHOD AND APPARATUS FOR MONITORING MASK PROCESS IMPACT ON LITHOGRAPHY PERFORMANCE

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

_____ of even date filed herewith; and
_____ filed on April 1, 2010 and
_____ assigned application no. 12/758,488 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

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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: Ping Chieh Wu

Residence Address: 3F, No. 12, Alley 16, Lane 78, Mingyuan St.
Shulin City, Taipei County 238, Taiwan, R.O.C.

Dated: Mar. 29, 2010

Ping Chieh Wu
Inventor Signature

Inventor Name: Chien-Hsun Chen

Residence Address: 4F, No. 21, Lane 251, Niupu E. Rd.
Xiangshan Dist., Hsinchu City 300, Taiwan, R.O.C.

Dated: Mar. 29, 2010

Chien Hsun Chen
Inventor Signature

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Inventor Name: Ru-Gun Liu

Residence Address: No. 9, Alley 19, Lane 452, Baoshan Rd.
Hsinchu City 300, Taiwan, R.O.C.

Dated: Mar. 29, 2010

Ru-Gun Liu
Inventor Signature

Inventor Name: Wen-Chun Huang

Residence Address: 58, Zhong-Shan Rd., Xi-Gang Village
Xi-Gang Xiang, Tainan County, Taiwan, R.O.C.

Dated: Mar. 29, 2010

Wen-Chun Huang
Inventor Signature

Inventor Name: Chih-Ming Lai

Residence Address: 3F, No. 2, Lane 15, Peiying St.
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Dated: Mar. 29, 2010

Chih-Ming Lai
Inventor Signature

Inventor Name: Boren Luo

Residence Address: 5F, No. 157, Sec. 1, Jiafeng 2nd St.
Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

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Inventor Signature