

PATENT ASSIGNMENT

Electronic Version v1.1

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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>Li-Jun Chen</td><td>05/30/2007</td></tr><tr><td>Tsai-Sheng Gau</td><td>05/30/2007</td></tr><tr><td>Chi-Kang Peng</td><td>06/01/2007</td></tr></tbody></table>	Name	Execution Date	Li-Jun Chen	05/30/2007	Tsai-Sheng Gau	05/30/2007	Chi-Kang Peng	06/01/2007	
Name	Execution Date								
Li-Jun Chen	05/30/2007								
Tsai-Sheng Gau	05/30/2007								
Chi-Kang Peng	06/01/2007								
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									
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11764573</td></tr></tbody></table>	Property Type	Number	Application Number:	11764573					
Property Type	Number								
Application Number:	11764573								
CORRESPONDENCE DATA									
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NAME OF SUBMITTER:	Dave R. Hofman								

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PATENT
REEL: 019444 FRAME: 0808

Total Attachments: 2
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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|----------------|----|---|
| (1) | Li-Jui Chen | of | 18F-1, No. 6, Lane 175, Wu-Ling Road
Hsinchu City, Taiwan, R.O.C. |
| (2) | Tsai-Sheng Gau | of | No. 35, Lane 4, An-Kang Street
Hsinchu City, Taiwan, R.O.C. |
| (3) | Chi-Kang Peng | of | 4F, No. 9-8 Alley 23, Lane 53, Dongnan Street
Hsinchu City 300, Taiwan, R.O.C. |

have invented certain improvements in

IN-LINE PARTICLE DETECTION FOR IMMERSION LITHOGRAPHY

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 June 18, 2007 and assigned application number 11/764,573; 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.

Docket No.: 2007-0062 / 24061.920
Customer No.: 42717

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: Li-Jui Chen

Residence Address: 18F-1, No. 6, Lane 175, Wu-Ling Road
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Dated: 5/30/2007

Li-Jui Chen
Inventor Signature

Inventor Name: Tsai-Sheng Gau

Residence Address: No. 35, Lane 4, An-Kang Street
Hsinchu City, Taiwan, R.O.C.

Dated: 5/30/2007

Tsai-Sheng Gau
Inventor Signature

Inventor Name: Chi-Kang Peng

Residence Address: 4F, No. 9-8 Alley 23, Lane 53, Dongnan Street
Hsinchu City 300, Taiwan, R.O.C.

Dated: 6/1/2007

Chi-Kang Peng
Inventor Signature