

## PATENT ASSIGNMENT

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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>Chin-Min Lin</td> <td>06/21/2007</td> </tr> <tr> <td>Dun-Nian Young</td> <td>06/21/2007</td> </tr> <tr> <td>Ching-Chun Wang</td> <td>06/21/2007</td> </tr> <tr> <td>Tzu-Hsuan Hsu</td> <td>06/21/2007</td> </tr> <tr> <td>chun-Ming Su</td> <td>06/21/2007</td> </tr> </tbody> </table>		Name	Execution Date	Chin-Min Lin	06/21/2007	Dun-Nian Young	06/21/2007	Ching-Chun Wang	06/21/2007	Tzu-Hsuan Hsu	06/21/2007	chun-Ming Su	06/21/2007
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Tzu-Hsuan Hsu	06/21/2007												
chun-Ming Su	06/21/2007												
RECEIVING PARTY DATA													
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.												
Street Address:	No. 8, Li-Hsin Rd. 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>13692104</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13692104								
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CORRESPONDENCE DATA													
Fax Number:	2142000853												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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OP \$40.00 13692104

NAME OF SUBMITTER:

David M. O'Dell

Total Attachments: 3

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**ASSIGNMENT**

WHEREAS, we,

- (1) Chin-Min Lin of 19F-2, No. 25, Jianjhong 1st Road  
Hsinchu City 300, Taiwan, R.O.C.
- (2) Dun-Nian Yaung of 4F, No. 15, Lane 130, Wansheng Street, Wunshan District  
Taipei City 116, Taiwan, R.O.C.
- (3) Ching-Chun Wang of 3F-1, No. 28, Lane 158, Sec. 2, Dongmen Road  
Tainan, Taiwan, R.O.C.
- (4) Tzu-Hsuan Hsu of No. 72, Gangshan Central Street, Cianjhen District  
Kaohsiung City 806, Taiwan, R.O.C.
- (5) Chun-Ming Su of No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park  
Hsin-Chu, Taiwan 300-77, R.O.C.

have invented certain improvements in

**APPARATUS AND METHOD FOR REDUCING OPTICAL  
CROSS-TALK IN IMAGE SENSORS**

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 17, 2007 and assigned application number 11/779,122; 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, R.O.C. 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.

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.

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Inventor Name: Chin-Min Lin

Residence Address: 19F-2, No. 25, Jianjhong 1st Road  
Hsinchu City 300, Taiwan, R.O.C.

Dated: 6/21 2007

CHIN-MIN LIN.  
Inventor Signature

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Inventor Name: Dun-Nian Yaung

Residence Address: 4F, No. 15, Lane 130, Wansheng Street, Wunshan District  
Taipei City 116, Taiwan, R.O.C.

Dated: 6/21 2007

Dun-Nian Yaung  
Inventor Signature

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Inventor Name: Ching-Chun Wang

Residence Address: 3F-1, No. 28, Lane 158, Sec. 2, Dongmen Road  
Tainan, Taiwan, R.O.C.

Dated: 6/21 '07

*Ching-Chun Wang*  
Inventor Signature

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Inventor Name: Tzu-Hsuan Hsu

Residence Address: No. 72, Gangshan Central Street, Cianjhen District  
Kaohsiung City 806., Taiwan, R.O.C.

Dated: 6/21 '07

*Tzu-Hsuan Hsu*  
Inventor Signature

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Inventor Name: Chun-Ming Su

Residence Address:

Dated: 6/21, 2007

*Chun-Ming Su*  
Inventor Signature

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