

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Shyh-Fann TING</td> <td>01/15/2013</td> </tr> <tr> <td>Chih-Yu LAI</td> <td>01/15/2013</td> </tr> <tr> <td>Cheng-Ta WU</td> <td>01/15/2013</td> </tr> <tr> <td>Yeur-Luen TU</td> <td>01/15/2013</td> </tr> <tr> <td>Ching-Chun WANG</td> <td>01/15/2013</td> </tr> </tbody> </table>		Name	Execution Date	Shyh-Fann TING	01/15/2013	Chih-Yu LAI	01/15/2013	Cheng-Ta WU	01/15/2013	Yeur-Luen TU	01/15/2013	Ching-Chun WANG	01/15/2013
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RECEIVING PARTY DATA													
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.												
Street Address:	No. 8, Li-Hsin Rd. VI, Hsinchu Science Park												
City:	Hsinchu												
State/Country:	TAIWAN												
Postal Code:	300												
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>13743979</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13743979								
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Application Number:	13743979												
CORRESPONDENCE DATA													
Fax Number:	7035185499												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	7036841111												
Email:	tsmc@jpfirm.com												
Correspondent Name:	Lowe Hauptman Ham & Berner, LLP (TSMC)												
Address Line 1:	1700 Diagonal Road, Suite 300												
Address Line 4:	Alexandria, VIRGINIA 22314												
ATTORNEY DOCKET NUMBER:	T5057-760U												
NAME OF SUBMITTER:	Randy A. Noranbrock												
Total Attachments: 1 source=efiledassgn#page 1.tif													

OP \$40.00 13743979

### ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) Shyh-Fann TING
- 2) Chih-Yu LAI
- 3) Cheng-Ta WU
- 4) Yeur-Luen TU
- 5) Ching-Chun WANG

who has made a certain new and useful invention, hereby sells, assigns and transfers unto TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., having a place of business at No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

**BACKSIDE ILLUMINATED IMAGE SENSOR WITH NEGATIVELY CHARGED LAYER**

(a) for which an application for United States Letters Patent was filed on 2013-01-17, and identified by United States Patent Application No. 13/743,979; or

(b) for which an application for United States Letters Patent was executed on \_\_\_\_\_,

and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated aside my signature:

1) Shyh-Fann Ting  
Name: Shyh-Fann TING

2013.01.15  
Date:

2) Chih-Yu Lai  
Name: Chih-Yu LAI

2013.01.15  
Date:

3) Cheng-Ta Wu  
Name: Cheng-Ta WU

2013.01.15  
Date:

4) Yeur-Luen Tu  
Name: Yeur-Luen TU

2013.01.15  
Date:

5) Ching-Chun Wang  
Name: Ching-Chun WANG

2013.01.15  
Date: