

# PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Shau-Lin SHUE	01/10/2008
Ting-Chu KO	01/14/2008
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	No. 8, Lin-Hsin Rd. 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:	12021062
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	9727398635
Email:	lydia.eppshilliard@haynesboone.com
Correspondent Name:	David M. O'Dell
Address Line 1:	HAYNES AND BOONE, LLP
Address Line 2:	901 Main Street, Suite 3100
Address Line 4:	Dallas, TEXAS 75202
ATTORNEY DOCKET NUMBER:	24061.973
NAME OF SUBMITTER:	David M. O'Dell

Total Attachments: 3  
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**PATENT**  
**REEL: 020595 FRAME: 0226**

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## ASSIGNMENT

WHEREAS, we,

- |     |               |    |  |
|-----|---------------|----|--|
| (1) | Shau-Lin SHUE | of | 5F, No. 25, Alley 6, Lane 485, Kwung-Fu Rd. 1<br>Hsinchu, Taiwan, R.O.C. |
| (2) | Ting-Chu KO   | of | 29, Aly, 28, Lane 188, Hsin-Siang St.<br>Hsinchu 300, Taiwan, R.O.C.     |

have invented certain improvements in

### A NOVEL APPROACH TO REDUCE THE CONTACT RESISTANCE

for which we have executed an application for Letters Patent of the United States of America, filed on January 28, 2008, Application No. 12/021,062; and

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.

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: Shau-Lin SHUE

Residence Address: 5F No. 25, Alley 6, Lane 485, Kwung-Fu Rd. 1  
Hsinchu, Taiwan, R.O.C.

Dated: 2008-01-10

  
Inventor Signature

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Inventor Name: Ting-Chu KO

Residence Address: 29, Aly. 28, Lane 188, Hsin-Siang St.  
Hsinchu 300, Taiwan, R.O.C.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Inventor Signature

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Inventor Name: Shau-Lin SHUE

Residence Address: 5F No. 25, Alley 6, Lane 485, Kwung-Fu Rd. 1  
Hsinchu, Taiwan, R.O.C.

Dated: \_\_\_\_\_

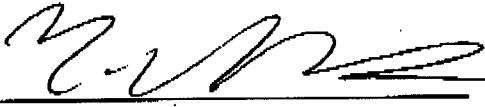
\_\_\_\_\_  
Inventor Signature

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Inventor Name: Ting-Chu KO

Residence Address: 29, Aly. 28, Lane 188, Hsin-Siang St.  
Hsinchu 300, Taiwan, R.O.C.

Dated: Feb 14, 2008

  
\_\_\_\_\_  
Inventor Signature