

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Cheng-Hsien Wu	11/08/2011
Chih-Hsin Ko	11/08/2011
Clement Hsingjen Wann	11/11/2011
RECEIVING PARTY DATA	
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.
Street Address:	No. 8, Li-Hsin Road 6
City:	Hsin-Chu
State/Country:	TAIWAN
Postal Code:	300-77
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13295178
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
Phone:	214-651-5000
Email:	ipdocketing@haynesboone.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	HAYNES AND BOONE, LLP
Address Line 1:	2323 Victory Avenue
Address Line 2:	Suite 700
Address Line 4:	Dallas, TEXAS 75219
ATTORNEY DOCKET NUMBER:	24061.1941
NAME OF SUBMITTER:	Eric Q. Li
Total Attachments: 2 source=1941_Assignment#page1.tif source=1941_Assignment#page2.tif	

OP \$40.00 13295178

501722289

**PATENT**  
**REEL: 027219 FRAME: 0268**

## ASSIGNMENT

WHEREAS, we,

- |     |                       |    |   |
|-----|-----------------------|----|---|
| (1) | Cheng-Hsien Wu        | of | 7F-2, No. 18, Lane 107, Kexueyuan Road, East District<br>Hsinchu City 300, Taiwan, R.O.C. |
| (2) | Chih-Hsin Ko          | of | No. 1, Lane 200, Wunheng Road<br>Fongshan City, Kaohsiung County 830, Taiwan, R.O.C.      |
| (3) | Clement Hsingjen Wann | of | 1179 Barrett Circle West<br>Carmel, NY 10512 USA  |

have invented certain improvements in

## A SEMICONDUCTOR DEVICE WITH ENHANCED STRAIN

for which we have filed and executed an application for Letters Patent of the United States of America on November 14, 2011, as U.S. Serial No. 13/295,178; 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, 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.

---

Inventor Name: Cheng-Hsien Wu

Residence Address: 7F-2, No. 18, Lane 107, Kexueyuan Road, East District  
Hsinchu City 300, Taiwan, R.O.C.

Dated: ✓ 2011.11.8

✓ Cheng-Hsien Wu  
Inventor Signature

---

Inventor Name: Chih-Hsin Ko

Residence Address: No. 1, Lane 200, Wunheng Road  
Fongshan City, Kaohsiung County 830, Taiwan, R.O.C.

Dated: ✓ 2011.11.8

✓ Chih-Hsin Ko  
Inventor Signature

---

Inventor Name: Clement Hsingjen Wann

Residence Address: 1179 Barrett Circle West  
Carmel, NY 10512 USA

Dated: ✓ 2011.11.11

✓ Clement Wann  
Inventor Signature