PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chia-Pao Shu	01/10/2011
Chia-Hua Chu	01/10/2011

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Company, Ltd.	
Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park	
City:	Hsin-Chu	
State/Country:	TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13006239

CORRESPONDENCE DATA

Fax Number: (214)200-0853

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 9727396923

Email: linda.ingram@haynesboone.com

Correspondent Name: HAYNES AND BOONE, LLP IP Section

Address Line 1: 2323 Victory Avenue

Address Line 2: Suite 700

Address Line 4: Dallas, TEXAS 75219

ATTORNEY DOCKET NUMBER: 24061.1681

NAME OF SUBMITTER: David M. O'Dell

Total Attachments: 2

source=1681Assignment#page1.tif source=1681Assignment#page2.tif

PATENT

REEL: 025637 FRAME: 0186

OF \$40.00 1300623

Docket No.: 2010-1051 / 24061.1681

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1) Chia-Pao Shu of 6, Creation Rd. 2, Hsinchu Science Park

Hsichu 300-77, Taiwan, R.O.C.

(2) Chia-Hua Chu of No. 1, Lane 176, Aikou 6th Street

Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

have invented certain improvements in

BULK SILICON MOVING MEMBER WITH DIMPLE

for which we have executed an application for Letters Patent of the United States of America on January 13, 2011, and assigned U.S. Serial No. 13/006,239.

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 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 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.

Page 1 of 2

Docket No.: 2010-1051 / 24061.1681

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:

Chia-Pao Shu

Residence Address:

6, Creation Rd. 2, Hsinchu Science Park

Hsinchu 300-77, Taiwan, R.O.C.

Dated: 2011, 01,10

Chia Pao, Shu Inventor Signature

Inventor Name:

Chia-Hua Chu

Residence Address:

No. 1, Lane 176, Aikou 6th Street

Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 2011.01.10

Chia-Hua Chu Inventor Signature

R-1681 (2010-1051) - Assignment 1-7-11 (tk)

RECORDED: 01/13/2011

Page 2 of 2

PATENT REEL: 025637 FRAME: 0188