

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chih-Wei Hung	04/03/2009
Chia-Ta Hsieh	04/03/2009
Luan C. Tran	04/03/2009

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:	12432214

CORRESPONDENCE DATA

Fax Number: (214)200-0853
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
 Phone: 214-651-5000
 Email: ipdocketing@haynesboone.com
 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:	24061.1176
NAME OF SUBMITTER:	Bart Fisher

Total Attachments: 2
 source=1176_Assignment#page1.tif

CH \$40.00 12432214

500847535

**PATENT
 REEL: 022614 FRAME: 0415**

ASSIGNMENT

WHEREAS, we,

- (1) Chih-Wei Hung of 7F-3, No. 106, Hwa-Yuan Street
Hsin-Chu City, Taiwan, R.O.C.
- (2) Chia-Ta Hsieh of No. 7, Lane 133, Tung-Feng Road
Tainan, Taiwan, R.O.C.
- (3) Luan C. Tran of 9F-5, Da-Shun, 3rd Road
Shin-Shih Township, Tainan County, Taiwan, R.O.C.

have invented certain improvements in

NON-VOLATILE FIELD PROGRAMMABLE GATE ARRAY

for which we have executed an application for Letters Patent of the United States of America,

 X of even date filed herewith; and
 filed on April 29, 2009 and assigned application number 12/432,214 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.

Docket No.: 2008-0547 / 24061.1176
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: Chih-Wei Hung
Residence Address: 7F-3, No. 106, Hwa-Yuan Street
Hsin-Chu City, Taiwan, R.O.C.

Dated: April 3rd, 2009 Chih-wei Hung
Inventor Signature

Inventor Name: Chia-Ta Hsieh
Residence Address: No. 7, Lane 133, Tung-Feng Road
Tainan, Taiwan, R.O.C.

Dated: April 3rd, 2009 Chia-Ta Hsieh
Inventor Signature

Inventor Name: Luan C. Tran
Residence Address: 9F-5, Da-Shun, 3rd Road
Shin-Shih Township, Tainan County, Taiwan, R.O.C.

Dated: April 3rd, 2009 Luan C. Tran
Inventor Signature