

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
Chi-Yuan SHIH	08/02/2011
I-Hsiung HUANG	08/03/2011
Heng-Hsin LIU	08/03/2011
<b>RECEIVING PARTY DATA</b>	
Name:	Taiwan Semiconductor Manufacturing Co., Ltd.
Street Address:	No. 8, Li-Hsin Road 6
Internal Address:	Science-Based Industrial Park
City:	Hsin-Chu
State/Country:	TAIWAN
Postal Code:	300-77
<b>PROPERTY NUMBERS Total: 1</b>	
Property Type	Number
Application Number:	13196200
<b>CORRESPONDENCE DATA</b>	
Fax Number:	(215)689-4905
Phone:	215-979-1000
Email:	jsjulianti@duanemorris.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:	DUANE MORRIS LLP (TSMC) IP DEPARTMENT
Address Line 1:	30 SOUTH 17TH STREET
Address Line 4:	PHILADELPHIA, PENNSYLVANIA 19103-4196
ATTORNEY DOCKET NUMBER:	N1085-00797
NAME OF SUBMITTER:	Steven E. Koffs
Total Attachments: 2 source=EXECUTEDASSIGN#page1.tif source=EXECUTEDASSIGN#page2.tif	

CH \$40.00 13196200

Serial No. 13/196,200

filed August 2, 2011

**ATTORNEY DOCKET NO.: 2011.0313/1085.797**

**ASSIGNMENT AND AGREEMENT**

For value received, we, **Chi-Yuan SHIH, I-Hsiung HUANG and Heng-Hsin LIU**, hereby transfer to **Taiwan Semiconductor Manufacturing Co., Ltd.**, with its principal place of business located at No. 8, Li-Hsin Road 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, Republic of China, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **OVERLAY ALIGNMENT MARK AND METHOD OF DETECTING OVERLAY ALIGNMENT ERROR USING THE MARK**, described in a non-provisional application and under any and all Letters Patent and any divisions, continuations, continuations-in-part, reexamination certificates, reissues, and extensions thereof, or claiming priority therefrom that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Taiwan Semiconductor Manufacturing Co., Ltd. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Taiwan Semiconductor Manufacturing Co., Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Taiwan Semiconductor Manufacturing Co., Ltd. in the United States and in all countries foreign to the United States, or to such nominees as Taiwan Semiconductor Manufacturing Co., Ltd. may designate.

ATTORNEY DOCKET NO.: 2011.0313/1085.797

We agree that, when requested, we shall, without charge to Taiwan Semiconductor Manufacturing Co., Ltd. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Inventor No. 1

Dated: 8/2/2011

Victor Shih  
Chi-Yuan SHIH

Residence:

10F, 62, Zhubei City, Hsinchu County, Taiwan, R.O.C.

Inventor No. 2

Dated: 8/3/2011

I-Hsiung Huang  
I-Hsiung HUANG

Residence:

No. 99, Guangxing Street, Hukou Shiang, Hsinchu County 303, Taiwan, R.O.C.

Inventor No. 3

Dated: 8/3/2011

Heng-Hsin Liu  
Heng-Hsin LIU

Residence:

7F., No. 116-1, Section 1, Huanhe E. Road, Yonghe City, Taipei County 234, Taiwan, R.O.C.