## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3000585

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
PO-KEN LIN	08/27/2014
CHANG-MING WU	08/27/2014
CHERN-YOW HSU	08/27/2014
SHIH-CHANG LIU	08/27/2014

#### **RECEIVING PARTY DATA**

Name:	e: TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
Street Address:	NO. 8, LI-HSIN RD. 6	
Internal Address:	HSIN-CHU SCIENCE PARK	
City:	HSIN-CHU	
State/Country:	TAIWAN	
Postal Code:	300-77	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	14471082	

#### **CORRESPONDENCE DATA**

Fax Number: (216)502-0601

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 216-502-0600

Email: docketing@eschweilerlaw.com

**Correspondent Name:** ESCHWEILER & ASSOCIATES, LLC. Address Line 1: 629 EUCLID AVENUE, SUITE 1000 NATIONAL CITY BANK BUILDING Address Line 2:

Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	TSMCP481US
NAME OF SUBMITTER:	DAVID W. POTASHNIK
SIGNATURE:	/David W. Potashnik/
DATE SIGNED:	08/28/2014

**Total Attachments: 6** 

source=Assignment#page1.tif

**REEL: 033627 FRAME: 0513** 502953987

**PATENT** 

source=Assignment#page2.tif	
source=Assignment#page3.tif	
source=Assignment#page4.tif	
source=Assignment#page5.tif	
source=Assignment#page6.tif	

### **PATENT ASSIGNMENT**

#### PARTIES TO THE ASSIGNMENT

### Assignor(s):

Po-ken Lin 13F, No. 49, Lane 19, Guanxin Rd. East Dist. Hsinchu City 30072 Taiwan (R.O.C.)

#### Assignor(s):

Chang-Ming Wu No. 16, 327 Ave. Yuan Sun Rd. Chun Ho Div. New Taipei City Taiwan (R.O.C.)

#### Assignor(s):

Chern-Yow Hsu 4F, No. 111-1, Xian Zheng 2nd Rd. Hsin-Chu County Chu-Bei City 302 Taiwan (R.O.C.)

#### Assignor(s):

Shih-Chang Liu No. 21-1, Yuku Village Kaohsiung County Alian Township 822 Taiwan (R.O.C.)

#### Assignee:

Taiwan Semiconductor Manufacturing Co., Ltd. No. 8, Li-Hsin Rd. 6, Hsin-Chu Science Park Hsin-Chu, Taiwan 300-77 Republic of China

#### **AGREEMENT**

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

# "A PHASE CHANGE MEMORY STRUCTURE TO REDUCE LEAKAGE FROM THE HEATING ELEMENT TO THE SURROUNDING MATERIAL" for which:

a non-provisional application for United States Letters Patent:

	$\boxtimes$	was executed on even date preparatory to filing (each inventor should sign this
		Assignment on the same day as he/she signs the Declaration); or
		was filed on and accorded U.S. Serial No; or
		I hereby authorize and request my attorney associated with Customer No
ò:		107476, to insert on the designated lines below the filing date and application
		number of said application when known:
		U.S. Serial No,
		filed on .

WHEREAS, ASSIGNEE (listed above), a corporation of the Republic of China is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said invention and improvements, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S)

Page 2 of 6 PATENT REEL: 033627 FRAME: 0516

hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

1 8/x) /201U

Name 1<sup>st</sup> Inventor Po-ken L

**PATENT** 

**REEL: 033627 FRAME: 0518** 

2014-8.27

Name

e 3<sup>rd</sup> Inventor Chern-Yow Hsu

PATENT

REEL: 033627 FRAME: 0519

Date - 08.7

**RECORDED: 08/28/2014** 

Name 4th Inventor Shint-Chang Liu

Page 6 of 6