#### 506252818 09/15/2020

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6299564

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHEN-HUA YU	04/08/2011
CHENG-HUNG CHANG	04/08/2011
EBIN LIAO	04/08/2011
CHIA-LIN YU	04/08/2011
HSIANG-YI WANG	04/08/2011
CHUN HUA CHANG	04/08/2011
LI-HSIEN HUANG	04/08/2011
DARRYL KUO	04/08/2011
TSANG-JIUH WU	04/08/2011
WEN-CHIH CHIOU	04/08/2011

#### RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. VI, HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300

### **PROPERTY NUMBERS Total: 1**

Property Type	Number			
Application Number:	17021600			

#### CORRESPONDENCE DATA

Fax Number: (703)518-5499

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: 7036841111 Email: tsmc@ipfirm.com

HAUPTMAN HAM, LLP (TSMC) Correspondent Name:

Address Line 1: 2318 MILL ROAD Address Line 2: **SUITE 1400** 

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: T5057-Y444E

**REEL: 053777 FRAME: 0592** 506252818

PAIENI

NAME OF SUBMITTER:	RANDY A. NORANBROCK				
SIGNATURE:	/Randy A. Noranbrock/				
DATE SIGNED:	09/15/2020				
Total Attachments: 2					
source=efiledassgn#page1.tif					
source=efiledassgn#page2.tif					

PATENT REEL: 053777 FRAME: 0593

Sv

# ASSIGNMENT

	In considerat	tion of the	e premises and	l other g	ood and	valuable	consideration	in hand	paid, the	receipt a	nd sufficiency	y of
which is	hereby ackno	wiedged,	the undersign	ed,								

		(c. 4000000000 00000000000000000000000000		
	I)	Chen-Hun YU	7)	Li-Hsien HUANG
	2)	Cheng-Hung CHANG	8)	Darryl KUO
	3)	Ebin LIAO	9)	Tsang-Jiuh WU
	4)	Chia-Lin YU	10)	Wen-Chih CHIOU
	5)	Hsiang-Yi WANG		•
	6)	Chun Hua CHANG		
who has	made	a certain new and useful invention, he	reby sells	assigns and transfers unto
TAIW	AN.	SEMICONDUCTOR MANUF	ACTUE	UNG COMPANY, LTD, having a place of business at No.
8. Li-H	sin.)	Rd. VI. Hsinchu Science Park,	Hsinch	u 300, Taiwan R.O.C.
		and assigns (hereinafter designated "AS 5 U.S.C. 100 in the invention entitled	SIGNEE"	) the entire right, title and interest for the United States of America
THRO	UG)	<u>i-silicon vias for semi</u>	COND	OUTOR SUBSTRATE AND METHOD OF
MANI	TAC	TURE		
*********				
(a)	for w State	hich an application for United States Less Patent Application No. 13/085,	tters Pate 668	nt was filed on 4-13-2011 , and identified by United ; or
(b)	for w	hich an application for United States Le	tters Pate	nt was executed on
all Unite continua Property	d Star tions- to the	tes Letters Patent which may be grante in-part thereof, and the right to all be	d therefor inefits un SSIGNEE	States Commissioner of Patents and Trademarks to issue any and e and any and all extensions, divisions, reissues, continuations, or der the International Convention for the Protection of Industrial its successors, assigns and legal representatives; the undersigned after act on behalf of said ASSIGNEE;
applicati ASSIGN applicati ASSIGN	on for EE, i ons f EE, i	rand obtaining original, divisional, reiss ts successors, assigns and legal represes or patent based thereon, growing out	sued or ex ntatives, a of or rela	like interest, and to render all necessary assistance in making tended Letters Patent of the United States, upon request of the said and without further remuneration, in and to any improvements, and ted to the said invention; and to execute any papers by the said feemed essential to ASSIGNEE's full protection and title in and to
]) Name: 2)		ne date Indicated aside my signature:  1-Hua YU	- 	4/8/11/ Date:
3)		LIAO		<u> </u>

PATENT REEL: 053777 FRAME: 0594

di Chia-Lin Yu	7011. K. B
Name; Chia-Lin YU	Date:
5) Hstang-Yt WANG	>04. 4. 8
Name: Hslang-Yi WANG	Date:
6) Open Where CHANG	7011, 4, 8
Name: Chun Hun CHANG	Date:
7) Li-Hsien Huang	2011. A. B
Name: Li-Hsien HUANG	Date:
8) Darry Kuo	2011, 4,8
Name: Darryl KUO	Date:
9) Tsome-Ojula Wa	2011 4 8
Name: Tsang Giuli WU	Date
10) Wen Chih Clips	2011. 4.8
Name: Was Chile CHIROH	Merkant.

PATENT REEL: 053777 FRAME: 0595

**RECORDED: 09/15/2020**