## 505198687 11/20/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5245456

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHENG YU HUANG	10/18/2018
CHUN-HAO CHUANG	10/18/2018
CHIEN-HSIEN TSENG	10/18/2018
KAZUAKI HASHIMOTO	10/18/2018
KENG-YU CHOU	10/18/2018
WEI-CHIEH CHIANG	10/18/2018
WEN-HAU WU	10/18/2018

### **RECEIVING PARTY DATA**

Name:	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:	16156061

#### **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 & POTASHNIK, LLC

Address Line 1: ROSETTA CENTER

Address Line 2:629 EUCLID AVE., SUITE 1000Address Line 4:CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	TSMCP916US
NAME OF SUBMITTER:	DAVID W. POTASHNIK
SIGNATURE:	/David W. Potashnik/

505198687 PATENT REEL: 047550 FRAME: 0693

DATE SIGNED:	11/20/2018
Total Attachments: 3	
source=Assignment#page1.tif	
source=Assignment#page2.tif	
source=Assignment#page3.tif	

PATENT REEL: 047550 FRAME: 0694

## TSMC Docket No.P20180220US00 Docket No. TSMCP916US

## **PATENT ASSIGNMENT**

# PARTIES TO THE ASSIGNMENT

<u>Assignor(s):</u> Cheng Yu Huang
Assignor(s): Chun-Hao Chuang
Assignor(s): Chien-Hsien Tseng
<u>Assignor(s):</u> Kazuaki Hashimoto
Assignor(s): Keng-Yu Chou
Assignor(s): Wei-Chieh Chiang
Assignor(s): Wen-Hau Wu
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
"NARROW BAND FILTER WITH HIGH TRANSMISSION" for which:
a non-provisional application for United States Letters Patent:
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

Page 1 of 3

TSMC Docket No.P20180220US00 Docket No. TSMCP916US

I hereby author	ize and	request	my a	ittorney	associated	with	Customer	No
<u>107476</u> , to inser	rt on the	designat	ed lin	es belov	w the filing	date a	and applic	atior
number of said a	ipplicatio	n when k	nown:					
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) 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

Page 2 of 3

PATENT REEL: 047550 FRAME: 0696

### TSMC Docket No.P20180220US00 Docket No. TSMCP916US

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.

2018	10,	18	
Date		***************************************	*********

201	8,1	D,	18
Date			***************************************

2018.	10.	ſ	8
Date	***************************************	*******	*******

	Chien	Hsien	Treng
Name	3 <sup>rd</sup> Invento	r Chien-Hsien	Tseng (

201	P.	[0.	(8
Date	)		***************************************

J-	arial	er f	hack	Virus 1	7
Name	4 <sup>th</sup> Inventor	Kazuaki	Hash	imoto	_

201	8	į	0	ı	8		
Date		 *****	,	 *****	*******	 	****

20	17	10,	18
Date	***********	***************************************	