505799160 12/02/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHI-CHUAN CHUANG	08/14/2014
YI-HSIANG LAI	08/14/2014
JIE-HONG CHIANG	08/13/2014

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
Name:	NATIONAL TAIWAN UNIVERSITY
Street Address:	NO. 1, SEC. 4, ROOSEVELT RD., ZHONGZHENG DIST.
City:	TAIPEI CITY
State/Country:	TAIWAN
Postal Code:	100

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16700984

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: T5057-1042C

NAME OF SUBMITTER: RANDY A. NORANBROCK

PATENT REEL: 051154 FRAME: 0595

SIGNATURE:	/Randy A. Noranbrock/
DATE SIGNED:	12/02/2019
Total Attachments: 1 source=EfiledAssgn#page1.tif	

PATENT REEL: 051154 FRAME: 0596

Docket No. T5057-1042 TSMC2014-0187

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ASSIGNMENT

In consideration of the premises and other good and which is hereby acknowledged the undersigned	valuable consideration in hand paid	the receipt and sufficiency of	·
which is hereby acknowledged, the undersigned,	Pula	, and receipt and sufficiency ("

1) Chi-Chuan CHUANG

3) Jie-Hong CHIANG

2) Yi-Hsiang LAI

who has made a certain new and useful invention, hereby seils, assigns and transfers unto TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., having a place of business at No. 8, Li-Hsin Rd, VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C. and NATIONAL TAIWAN UNIVERSITY, having a place of business at No.1, Sec. 4, Roosevelt Rd., Zhongzheng Dist., Taipei City 100, Taiwan (R.O.C.)"

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

LOG	IC CIRCUIT AND SYSTEM AND COMPUT	ER PROGRAM PRODU	CT FOR LOGIC
	THESIS		
(a)	for which an application for United States Letters Patent w United States Patent Application No. <u>14/464,366</u>	ras filed on 2014-08-20 ; or	, and identified by
(b)	for which an application for United States Letters Patent w	as executed on,	
eontinu Propert agrees t applica ASSIG applica ASSIG	e undersigned hereby authorizes and requests the United Stated States Letters Patent which may be granted therefore are autions-in-part thereof, and the right to all benefits under by to the said ASSIGNEE, for its interest as ASSIGNEE, its that the attorneys of record in said application shall hereafter AND the undersigned hereby agrees to transfer a like tion for and obtaining original, divisional, reissued or extendible, its successors, assigns and legal representatives, and without the successors, assigns and legal representatives, deemention hereby transferred.	and any and all extensions, division the International Convention for successors, assigns and legal react on behalf of said ASSIGNEE interest, and to render all need Letters Patent of the United Swithout further remuneration, in a let the said invention; and to the said invention; and the said invention in the said invention; and the said invention in the said i	ons, reissues, continuations, or the Protection of Industrial presentatives; the undersigned contains assistance in making states, upon request of the said and to any improvements, and
SIGNE	D on the date indicated aside my signature:		•
1) Name	: Chi-Chuan CHUANG	>0 14 (8/1	4
	Yn Hrigy Lai : Yi-Hsiang LAI	Date: 2014/8/1	+
Name	n ,	Date:	
3)	fie Hong Jung	2014/8/13	n.ii

Date:

PATENT REEL: 051154 FRAME: 0597

RECORDED: 12/02/2019

Name: Jie-Hong CHIANG