## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
WEI-CHENG LIN	09/12/2019
HUI-TING YANG	12/24/2019
JIANN-TYNG TZENG	09/12/2019
LIPEN YUAN	10/07/2019
WEI-AN LAI	08/08/2019

#### **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17865272

#### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	T5057-1329UB
NAME OF SUBMITTER:	RANDY A. NORANBROCK
SIGNATURE:	/Randy A. Noranbrock/
DATE SIGNED:	07/14/2022

**Total Attachments: 3** 

PATENT REEL: 060511 FRAME: 0541

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PATENT REEL: 060511 FRAME: 0542

Docket No. T5057-1329U P20173326US00

## ASSIGNMENT

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

Wei-Cheng LIN 4) Lipen YUAN Wei-An LAI Hui-Ting YANG 5)

Jiann-Tyng TZENG

who has made a certain new and useful invention, hereby sells, 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.

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

# SEMICONDUCTOR DEVICE INCLUDING CELL REGION HAVING MOR SIMILAR CELL DENSITIES IN DIFFERENT HEIGHT ROWS, AND METHOD AND SYSTEM FOR

GEN	ERATING LAYOUT DIAGRAM OF SAME		<b></b>
(a)	for which an application for United States Letters Patent was file United States Patent Application No16/502,869	d on, ar	nd identified by
(b)	for which an application for United States Letters Patent was exe		
all Uni contint Proper	e undersigned hereby authorizes and requests the United States Co ited States Letters Patent which may be granted therefore and any uations-in-part thereof, and the right to all benefits under the In ty to the said ASSIGNEE, for its interest as ASSIGNEE, its succe that the attorneys of record in said application shall hereafter act on	and all extensions, divisions, reissues, of ternational Convention for the Protections and legal representatives;	continuations, or ion of Industrial
ASSIC applica ASSIC	AND the undersigned hereby agrees to transfer a like interestion for and obtaining original, divisional, reissued or extended Let SNEE, its successors, assigns and legal representatives, and without ations for patent based thereon, growing out of or related to the SNEE, its successors, assigns and legal representatives, deemed essention hereby transferred.	ters Patent of the United States, upon re t further remuneration, in and to any im said invention; and to execute any pa	equest of the said provements, and pers by the said
SIGNE	BD on the date indicated aside my signature:		
1)	Wei-Chang, Lin	2019/09/12 Date:	
Nam	e: Wei-Cheng LIN	Date:	na.
2)	ne: Hui-Ting YANG	Date:	
/	Trenn Types Tores  The Jiann-Tyng TZENG	>0(9/09/12 Date:	_

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# ASSIGNMENT

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In consideration of the premises and o which is hereby acknowledged, the undersigned	Affici good and v	Striatile Consideration in mare france rais	rescape was server
1) Wei-Cheng LIN	4)	Lipen VUAN	
2) Hui-Ting YANG	5)	Wei-An I.Al	
3) Jiann-Tyng TZENG			
who has made a certain new and useful inve MANUTACTURING COMPANY, LTD., has 900. Tacwar R.O.C. its successors and assigns (hereinafter designate	ing a place of b	ioness at No. 8, Li-Hsio Rd. VI. Hom	for science (see 11840-19
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DENSITIES IN DIFFERENT HEIG	HI ROWS.	AND METHOD AND SYSTE.	WFOR
GENERATING LAYOUT DIAGRA	M OF SAM		
(a) for which an application for United Sta United States Patent Application No.	ntes Letters Pater 16/502,869	ot was filed on 2019-07-03	and identified by
(h) for which an application for United Sta	sies Letters Pater	r was executed on	
and the undersigned hereby authorizes and requall Limited States Letters Peters which may be continuations in part thereof, and the right to Property to the said ASSIGNEE, for its interestagrees that the attorneys of record in said applic	granted therefore all benefits und tas ASSIGNEE	and any and all extensions, divisions, for the International Convention for the its successors, assigns and legal repre-	ressues, continuations, or ic Protection of Industrial
AND the undersigned hereby agree application to and obtaining original, devisions ASTOPTE, he successors, resigns and legal in applications for purer based thereon, growing ASTOPTE, as successors, assigns and legal in the invention hereby transferred.	al, reissued or ex- opresentatives, as gloss of or relat	id without further remaineration, in and ed to the east invention, and to execu-	s, upon request of the said to any improvenients, and te any papers by the said
SIGNED on the date indicated uside my signal.	ne:		
Name Wel-Cheng LIN		Date	
2) Maj Try Yang Same Hui Ting YANG		7019/12/24 Date:	
N <sub>SCIN</sub> Janu-Tyng TZFNG		Date:	

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PATENT REEL: 060511 FRAME: 0544 wolinzk 2019/00/07 11:14:44

4) Name: Lipen YUAN

V 5) VQ (/w Name: Wei-An LAI Docket No. T5057-1329U P20173326US00

2019/10/07

2019/08/08

Date:

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**RECORDED: 07/14/2022**