PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

1 v1.1 EPAS ID: PAT6324055

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
CHIH-HAO WANG	06/03/2014
WAI-YI LIEN	06/03/2014
SHI-NING JU	06/03/2014
KAI-CHIEH YANG	06/03/2014
WEN-TING LAN	06/03/2014

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
Street Address:	NO. 8, LI-HSIN RD. 6, SCIENCE BASED INDUSTRIAL PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15665276	

CORRESPONDENCE DATA

Fax Number: (202)756-8087

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.

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WDCIPPTSClerks@mwe.com

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ATTORNEY DOCKET NUMBER:	095714-0419
NAME OF SUBMITTER:	TAKASHI SAITO
SIGNATURE:	/Takashi Saito/
DATE SIGNED:	09/29/2020

Total Attachments: 2

PATENT REEL: 053915 FRAME: 0609 source=Assignment#page1.tif
source=Assignment#page2.tif

PATENT REEL: 053915 FRAME: 0610

ASSIGNMENT

WHEREAS, WE, CHIH-HAO WANG, WAI-YI LIEN, SHI-NING JU, KAI-CHIEH YANG and WEN-TING LAN citizen of the Republic of China, having the mailing addresses listed as below.

CHIH-HAO WANG having a mailing address of No. 9, Aly. 22, Ln. 80, Songcui Rd., Baoshan Township, Hsinchu County 308, Taiwan residing at Hsinchu County, Taiwan;

WAI-YI LIEN having a mailing address of No. 5, Aly. 53, Ln. 162, Gaocuei Rd., East Dist., Hsinchu City 30064, Taiwan residing at Hsinchu City, Taiwan;

SHI-NING JU having a mailing address of 10F., No. 306, Ln. 1050, Minghu Rd., East Dist., Hsinchu City 300, Taiwan residing at Hsinchu City, Taiwan;

KAI-CHIEH YANG having a mailing address of 3F., No. 9, Jiazheng 5th St., Zhubei City, Hsinchu County 302, Taiwan residing at Hsinchu County, Taiwan;

WEN-TING LAN having a mailing address of 18F.-15, No. 188, Guanxin Rd., East Dist., Hsinchu City 300, Taiwan residing at Hsinchu City, Taiwan,

ASSIGNORS, are the inventors of the invention in "SEMICONDUCTOR DEVICE AND METHOD OF FORMING VERTICAL STRUCTURE" for which we have executed an application for a Patent of the United States

\boxtimes	which is executed on	even date herewith or		[DATE]
\boxtimes	which is identified by Jones Da	y docket no. 181877-625122		
	which was filed on	, 2014, Application	No.	***************************************
	We hereby authorize and reque	st attorney(s) at Jones Day, to) inse	ert here in parentheses (Application number
	, filed) the filing da	ite ar	nd application number of said application when known.

and WHEREAS, Taiwan Semiconductor Manufacturing Company Limited, a corporation organized and existing under the laws of the Republic of China, and having an office for the transaction of business at No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu, Taiwan, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	6/3	, 2014	Chih-Hao Wang	LS.
y ∕ Date	6/3	, 2014	WAI-YI LIEN F. Le	L.S.
Bate	6/3	, 2014	V SHI-NING JU SHI-NING JU	L.S.
V Date	6/3	, 2014	Kar-Chieh Yang	L.S.
Date	6/3	, 2014	WEN-TING LAN WEN-TING LAN	L.S.

RECORDED: 09/29/2020