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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JYUN-YING LIN	09/08/2017
HSIN-LI CHENG	09/08/2017
JING-HWANG YANG	09/08/2017
FELIX YING-KIT TSUI	09/07/2017
CHIEN-LI KUO	09/08/2017

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15694218

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SIGNATURE:	/James R. Potashnik/
DATE SIGNED:	10/09/2017

PATENT REEL: 043815 FRAME: 0628 504585511

Total Attachments: 7 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif

PATENT REEL: 043815 FRAME: 0629

(77)

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s): Jyun-Ying Lin

Assignor(s): Hsin-Li Cheng

Assignor(s): Jing-Hwang Yang

Assignor(s): Fellx Ying-Kit Tsui

Assignor(s): Chien-Li Kuo

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

"LOW WARPAGE HIGH DENSITY TRENCH CAPACITOR" for which:

a non-provisional application for United States Letters Patent:

\boxtimes	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
	hereby authorize and request my attorney associated with Customer No.
	107476, to insert on the designated lines below the filing date and application
	number of said application when known:
	U.S. Serial No.
	filed on
	Page 1 of 7

Jan 2008

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TSMC Docket No. P20171173US00 Docket No. TSMCP810US

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

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.

Page 2 of 7

2012.9.8

Date

Name

Name 1stInventor J∳un-Ying Lin

Page 3 of 7

TSMC Docket No. P20171173US00 Docket No. TSMCP810US

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Page 4 of 7

TSMC Docket No. P20171173US00 Docket No. TSMCP810US

Page 5 of 7

TSMC Docket No. P20171173US00 Docket No. TSMCP810US

Page 6 of 7

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Date

TSMC Docket No. P20171173US00 Docket No. TSMCP810US

Name

me 5th Inventor

Page 7 of 7

Jan 2008

PATENT REEL: 043815 FRAME: 0636