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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
WEN-KUEI LIU	03/13/2014
TENG-CHUN TSAI	03/13/2014
KUO-YIN LIN	03/13/2014
SHEN-NAN LEE	03/13/2014
YU-WEI CHOU	03/13/2014
KUO-CHENG LIEN	03/13/2014
CHANG-SHENG LIN	03/13/2014
CHIH-CHANG HUNG	03/13/2014
YUNG-CHENG LU	03/13/2014

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15047793

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DATE SIGNED:	02/19/2016
Total Attachments: 11 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 source=Assignment#page8.tif	
source=Assignment#page10.tif source=Assignment#page11.tif	

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

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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 "BARC-ASSISTED PROCESS FOR PLANAR RECESSING OR REMOVING OF VARIABLE-HEIGHT LAYERS" for which:

a non-provisional application for United States Letters Patent:

\boxtimes	was executed on even date preparatory to filing (each inventor should sign			
	Assignment on the same day as he/she signs the Declaration); or			
□.	was filed on and accorded U.S. Serial No; or			
] I hereby authorize and request my attorney associated with Customer N			
	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			

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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.

/ 26/4/3/13 Date

Wen-Kuei Liu
Name 1st Inventor Wen-Kuei Liu

/	2014/3/13
	Date

V Teng-Chun Tsa:

Name 2nd Inventor Teng-Chun Tsai

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/ m 14 / 3 / 13 Date

Name Srd Inventor Kuo-Yin Lin

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Name 5 Inventor Yu-Wei Chou

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1 2014, 3, 13

Date

Grang-Shang Lin

√ →0/4 /3/\3 Date

chih-chang Hung

Name 8th Inventor Chih-Chang Hung

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√ <u>∂o/</u>4,3,/3 Date

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