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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
CHAN-HONG CHERN	03/06/2014
TSUNG-CHING HUANG	03/07/2014
CHIH-CHANG LIN	03/06/2014
MING-CHIEH HUANG	03/07/2014
FU-LUNG HSUEH	03/13/2014

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	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14214362

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ATTORNEY DOCKET NUMBER:	T5057-1003	
NAME OF SUBMITTER:	RANDY A.NORANBROCK	
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DATE SIGNED:	03/14/2014	

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TSMC NORTH AMERICA

Docket No. T5057-1003 TSMC2013-1772

ASSIGNMENT

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

- Chan-Hong CHERN 1)
- Ming-Chieh HUANG
- 2) Tsung-Ching HUANG
- 5) Fu-Lung HSUEH

Chih-Chang LIN

who has made a certain new and useful invention, hereby sells, assigns and transfers unto TAIWAN SEMICONDUCTOR MAN UFACTURING COMPANY, LTD., having a place of business at No. 8, Li-Hsin Rd. VI Hsinchu Science Park, Hsinchu 300. [aiwan R Q.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

VOLTAGE SUPPLY UNIT AND METHOD FOR OPERATING THE SAME

- (a) for which an application for United States Letters Patent was filed on 2014-03-14 United States Patent Application No. 14/214,362
- (b) for which an application for United States Letters Patent was executed on

and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the aid ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the automeys of record in said application shall hereafter act on behalf of said ASSIGN 3E;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSICNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNI D on the late indicated aside my signature:

PATENT REEL: 032447 FRAME: 0479

RECORDED: 03/14/2014

Name Da-Lung HSUEH