2154

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Huan-Tsung Huang	01/01/2009
Shyh-Horng Yang	12/26/2008
Yuri Masuoka	12/26/2008
Ken-Ichi Goto	12/26/2008

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Company, Ltd.	
Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park	
City:	Hsin-Chu	
State/Country:	TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13232154

CORRESPONDENCE DATA

Fax Number: (214)200-0853 **Phone**: 972-739-6923

Email: linda.ingram@haynesboone.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: HAYNES AND BOONE, LLP IP Section

Address Line 1: 2323 Victory Avenue

Address Line 2: Suite 700

Address Line 4: Dallas, TEXAS 75219

ATTORNEY DOCKET NUMBER: 24061.1976

NAME OF SUBMITTER: Thomas W. Kelton

PATENT

REEL: 026902 FRAME: 0835

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Total Attachments: 6

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PATENT REEL: 026902 FRAME: 0836 Ammenore 3005/13/50 00:03:58

Docket No.: 2008-0517 / 24061.1146

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1)	Huan-Tsung Huang	of	6F, #59 Chengggong 1st Street Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
(2)	Shyh-Horng Yang	of	13F-1, No. 153, Lane 89, Sec. 1, Kuangfu Road Hsinchu, Taiwan, R.O.C.
(3)	Yuri Masuoka	of	15F #126 Shengli 1st Road Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
(4)	Ken-Ichi Goto	of	89, 2-1, 9F-1, Su-Wei Road Hsin-Chu, Taiwan, R.O.C.

have invented certain improvements in

LOCAL CHARGE AND WORK FUNCTION ENGINEERING ON MOSFET

for which we have executed an application for Letters Patent of the United States of America,

X	of even date filed herewith; and				
	filed on	and assigned application no	and;		

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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Docket No.: 2008-0517 / 24061.1146

Customer No.: 42717

AND WE HEREBY covenant 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 said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name: Residence Address:	Huan-Tsung Huang 6F, #59 Chengggong 1st Street Jhubei City, Hsinchu County 302, Taiwan, R.O.C.				
Dated:	Inventor Signature				
Inventor Name:	Shyh-Horng Yang				
Residence Address:	13F-1, No. 153, Lane 89, Sec. 1, Kuangfu Road Hsinchu, Taiwan, R.O.C.				
Dated:					
Dated.	Inventor Signature				

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Docket No.: 2008-0517 / 24061.1146

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(2)	Shyh-Horng Yang	of	13F-1, No. 153, Lane 89, Sec. 1, Kuangfu Road Hsinchu, Taiwan, R.O.C.
(3)	Yuri Masuoka	of	15F #126 Shengli 1st Road Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
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NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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Docket No.: 2008-0517 / 24061.1146

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AND WE HEREBY covenant 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 said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name:	Huan-Tsung Huang			
Residence Address:	6F, #59 Chengggong 1st Street Jhubei City, Hsinchu County 302, Taiwan, R.O.C.			
Dated:	Inventor Signature			
Inventor Name:	Shyh-Horng Yang			
Residence Address:	13F-1, No. 153, Lane 89, Sec. 1, Kuangfu Road Hsinchu, Taiwan, R.O.C.			
Dated: / ユ / 2 ぴ	108 My -1- Jy Inventor Signature			

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Docket No.: 2008-0517 / 24061.1146

Customer No.: 42717

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(1)	Huan-Tsung Huang	of	6F, #59 Chengggong 1st Street Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
(2)	Shyh-Horng Yang	of	13F-1, No. 153, Lane 89, Sec. 1, Kuangfu Road Hsinchu, Taiwan, R.O.C.
(3)	Yuri Masuoka	of	15F #126 Shengli 1st Road Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
(4)	Ken-Ichi Goto	of	89, 2-1, 9F-1, Su-Wei Road Hsin-Chu , Taiwan, R.O.C.

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NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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Docket No.: 2008-0517 / 24061.1146

Customer No.: 42717

Inventor Name:

Yuri Masuoka

Residence Address:

15F #126 Shengli 1st Road

Jhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: 12/26/2008

Inventor Signature

Inventor Name:

Ken-Ichi Goto

Residence Address:

89, 2-1, 9F-1, Su-Wei Road East District

Hsin-Chu, Taiwan, R.O.C.

Dated: 12/26/ 08

Inventor Signature

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RECORDED: 09/14/2011

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PATENT REEL: 026902 FRAME: 0842