PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FENG WEI KUO	07/14/2014
KUANG-KAI YEN	07/18/2014
HUAN-NENG CHEN	07/14/2014
LEE TSUNG HSIUNG	07/14/2014
CHEWN-PU JOU	07/14/2014
ROBERT BOGDAN STASZEWSKI	07/14/2014

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED
Street Address:	NO. 8, LI-HSIN ROAD 6
Internal Address:	HSIN-CHU SCIENCE PARK
City:	HSIN-CHU
State/Country:	TAIWAN
Postal Code:	300-77

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14334748

CORRESPONDENCE DATA

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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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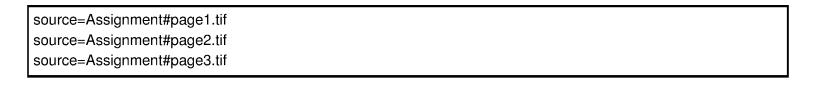
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ATTORNEY DOCKET NUMBER:	TSMC 2014-0343
NAME OF SUBMITTER:	ALI ASSAR
SIGNATURE:	/Ali Assar/
DATE SIGNED:	07/23/2014

Total Attachments: 3

PATENT
REEL: 033369 FRAME: 0876

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PATENT REEL: 033369 FRAME: 0877

ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

Feng Wei Kuo	Kuang-Kai Yen	Huan-Neng Chen
Hsinchu, TW	Koahsiung City, TW	Taichung City, TW
Lee Tsung Hsiung New Taipei City, TW	Chewn-Pu Jou Hsinchu, TW	Robert Bogdan Staszewski Delft, The Netherlands

NOW, THEREFORE, for and in consideration of our employment and the salary or wages paid to us by Taiwan Semiconductor Manufacturing Company Limited, I/we, Feng Wei Kuo, Kuang-Kai Yen, Huan-Neng Chen, Lee Tsung Hsiung, Chewn-Pu Jou, Robert Bogdan Staszewski, by these presents do sell, assign, and transfer unto said Taiwan Semiconductor Manufacturing Company Limited, a corporation organized and existing under the laws of the Republic of China, having its principal place of business at No. 8, Li-Hsin Road 6, Hsin-Chu Science Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring an interest therein, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions entitled

PHASE-LOCKED LOOP (PLL)

for which application for United States Letters Patent has been filed on Serial No. _____, or was executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been

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made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

✓ Feng We; Kuo Inventor's Signature Feng Wei Kuo	✓ 2014, 01.14 Date
Printed Name in English	
Inventor's Signature Kuang-Kai Yen Printed Name in English	v 2-574 . 69 . 18 Date
V Huan - Weng Chen Inventor's Signature Huan-Neng Chen Printed Name in English	Date
Inventor's Signature Lee Tsung Hsiung Printed Name in English	1 7014, 1.14 Date

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Inventor's Signature

Robert Bogdan Staszewski Printed Name iñ English

Inventor's Signature	v 20/4/07//4 Date
Chewn-Pu Jou Printed Name in English	
· Alle	1 2014-07-14

Date

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