PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jeremy D. Dunworth	01/21/2010
Gary J. Ballantyne	01/21/2010
Bhushan S. Asuri	02/25/2010
Jifeng Geng	01/22/2010
Gurkanwal S. Sahota	03/15/2010

RECEIVING PARTY DATA

Name:	QUALCOMM Incorporated
Street Address:	5775 Morehouse Drive
City:	San Diego
State/Country:	CALIFORNIA
Postal Code:	92121

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12632053

CORRESPONDENCE DATA

Fax Number: (858)658-2502

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

858-845-2505 Phone:

Email: patent.docketing.us@qualcomm.com Correspondent Name: QUALCOMM INCORPORATED

Address Line 1: 5775 MOREHOUSE DR.

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER:	091420
NAME OF SUBMITTER:	Christine Molla

REEL: 024096 FRAME: 0208

PATENT

Total Attachments: 15 source=091420_Assignment-3-17-10#page1.tif source=091420_Assignment-3-17-10#page2.tif source=091420_Assignment-3-17-10#page3.tif source=091420_Assignment-3-17-10#page4.tif source=091420_Assignment-3-17-10#page5.tif source=091420_Assignment-3-17-10#page6.tif source=091420_Assignment-3-17-10#page7.tif source=091420_Assignment-3-17-10#page8.tif source=091420 Assignment-3-17-10#page9.tif source=091420_Assignment-3-17-10#page10.tif source=091420_Assignment-3-17-10#page11.tif source=091420_Assignment-3-17-10#page12.tif source=091420 Assignment-3-17-10#page13.tif source=091420_Assignment-3-17-10#page14.tif source=091420_Assignment-3-17-10#page15.tif

Page 1 of 3

ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to us in hand paid, receipt of which is hereby acknowledged, be it known that We,

- 1. Jeremy D. Dunworth, a citizen of the United States of America, having a mailing address of 5775 Morehouse Drive, San Diego, CA, 92121-1714, US; and a resident of San Diego, CA, US; and
- Gary J. Ballantyne, a citizen of New Zealand, having a mailing address of 3 Spinnaker
 Lane, Sumner, Christchurch, 8081, NZ; and a resident of Christchurch, NZ; and
- 3. Bushan S. Asuri, a citizen of India, having a mailing address of 5775 Morehouse Drive, San Diego, CA, 92121-1714, US; and a resident of San Diego, CA, US; and
- 4. Jifeng Geng, a citizen of China, having a mailing address of 5775 Morehouse Drive, San Diego, CA, 92121-1714, US; and a resident of San Diego, CA, US; and
- 5. Gurkanwal S. Sahota, a citizen of India, having a mailing address of 5775 Morehouse Drive, San Diego, CA, 92121-1714, US; and a resident of San Diego, CA, US, have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the entire right, title and interest in and to a certain invention relating to PHASE LOCKED LOOP WITH DIGITAL COMPENSATION FOR ANALOG INTEGRATION by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on December 7, 2009, and assigned Serial Number 12/632,053, including, without limitation, all provisional patent applications, and all original and reissue patents granted thereof (in the United States and any foreign county), and all divisionals, continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible

ASSIGNMENT

to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, California this 21st	day of	January, 2010.
	Je	en, I Vinus L
		JEREMY D. DUNWORTH
Done at Christehurch, New Zealand this	da	ny of, 2010.
		GARY J. BALLANTYNE
Done at San Diego, California this	day of _	, 2010.
		BHUSHAN S. ASURI
Done at San Diego, California this	day of _	, 2010.
	<u>,</u>	JIFENG GENG

Page 3 of 3

ASSIGNMENT

The Commissioner of Patents and Trademarks is reque	sted to issue the Letters Patent which may
be granted for said invention or any part thereof ur	to said corporation in keeping with this
Assignment.	
Done at San Diego, California this day of	, 2010.

GURKANWALS, SAHOTA

Page 1 of 3

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- Gurkanwal S. Sahota, a citizen of India, having a mailing address of 5775 Morehouse
 Drive, San Diego, CA, 92121-1714, US; and a resident of San Diego, CA, US,

have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the entire right, title and interest in and to a certain invention relating to PHASE LOCKED LOOP WITH DIGITAL COMPENSATION FOR ANALOG INTEGRATION by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on December 7, 2009, and assigned Serial Number 12/632,053, including, without limitation, all provisional patent applications, and all original and reissue patents granted thereof (in the United States and any foreign county), and all divisionals, continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible

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Done at San Diego, California this	day of, 2010.
Done at Christehurch, New Zealand this	JEREMY D. DUNWORTH 21 54 day of July, 2010.
	GARY J. BALLANTYNE
Done at San Diego, California this	day of, 2010.
	BHUSHAN S. ASURI
Done at San Diego, California this	_day of, 2010.
	JIFENG GENG

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	GURK	ANWAL S. SAHOTA	

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Done at San Diego, California this day	of, 2010.
	JEREMY D. DUNWORTH
Done at Christchurch, New Zealand this	day of, 2010.
	GARY J. BALLANTYNE
Done at San Diego, California this 25th day	of February, 2010.
	d. s. Blingham
•	BHUSHAN S. ASURI
Done at San Diego, California this day	of, 2010.
	JIFENG GENG

ASSIGNMENT

	GURKANWAL S. SAHOTA	
Done at San Diego, California this day of	, 2010.	
	2010	
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Done at San Diego, California this	day of, 2010.
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Done at Christchurch, New Zealand this	day of, 2010.
	GARY J. BALLANTYNE
Done at San Diego, California thisd	lay of, 2010.
	BHUSHAN S. ASURI
Done at San Diego, California this <u>22</u> d	lay of <i>JG1</i> , 2010.
	JIFENG GENG

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GURKANWAL S. SAHOTA

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JIFENG GENG

Page 3 of 3

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Done at San Diego, California this 5 day of Many 2010.

GURKANWALS. SAHOTA

PATENT REEL: 024096 FRAME: 0224

RECORDED: 03/17/2010