PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL G. LUBY	11/03/2010
MOHAMMAD AMIN SHOKROLLAHI	11/08/2010
LORENZ CHIRSTOPH MINDER	11/03/2010

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:	15221476

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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.

Email: us-docketing@qualcomm.com Correspondent Name: QUALCOMM INCORPORATED Address Line 1: 5775 MOREHOUSE DRIVE Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 092830B2C2 NAME OF SUBMITTER: LISA NODARSE **SIGNATURE:** /Lisa Nodarse/ **DATE SIGNED:** 12/09/2016

Total Attachments: 4

source=092830B2C2 Assignment#page1.tif source=092830B2C2_Assignment#page2.tif source=092830B2C2_Assignment#page3.tif source=092830B2C2_Assignment#page4.tif

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. **Michael G. Luby**, a citizen of the United States of America having a mailing address of 3195 Kifer Road, Santa Clara, CA, 95051, US; and a resident of Berekley, California
- 2. **Mohammad Amin Shokrollahi**, a citizen of the **United States of America**, having a mailing address of Chemin du Cygne 1, 1028 Preverenges, Switzerland and a resident of **Preverenges**, **Switzerland** and
- Lorenz Christoph Minder, a citizen of Canada, having a mailing address of 3195 Kifer
 Road, Santa Clara, CA, 95051, US: and a resident of Palo Alto, California

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 METHODS AND APPARATUS EMPLOYING FEC CODES WITH PERMANENT INACTIVATION OF SYMBOLS FOR ENCODING AND DECODING PROCESSES by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on August 18th, 2010, and assigned Serial No. 12/859,161, which is a Continuation—in-Part of Non-Provisional Application Number 12/604,773, filed on October 23rd, 2009 and Provisional Application Number 61/353,910, filed on June 11th, 2010, and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/235,285, filed on August 19, 2009, and all original and reissue patents granted thereof (in the United States and any foreign country), and all divisionals, continuations and

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 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

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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,

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- 2. **Mohammad Amin Shokrollahi**, a citizen of the **United States of America**, having a mailing address of Chemin du Cygne 1, 1028 Preverenges, Switzerland and a resident of **Preverenges**, **Switzerland** and
- 3. **Lorenz Christoph Minder**, a citizen of **Canada**, having a mailing address of 3195 Kifer Road, Santa Clara, CA, 95051, US; and a resident of **Palo Alto, California**

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 METHODS AND APPARATUS EMPLOYING FEC CODES WITH PERMANENT INACTIVATION OF SYMBOLS FOR ENCODING AND DECODING PROCESSES by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on August 18th, 2010, and assigned Serial No. 12/859,161, which is a Continuation—in-Part of Non-Provisional Application Number 12/604,773, filed on October 23rd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009 and Provisional Application Number 61/257,146 filed on November 2nd, 2009, and all divisionals, continuations and

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 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.

	Michael G. Luby
Jone at Prevernges, Switzerb	and this <u>8</u> day of <u>Nov-</u> , 2010.
	142
	Mohammad Amin Shokrollahi
)one at Santa Clara, Califor i	nia this day of , 2010.

PATENT REEL: 040698 FRAME: 0598

RECORDED: 12/09/2016