PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Christian Pietsch | 06/02/2009 |
| Georg Frank | 06/02/2009 |
| Christian Sgraja | 06/02/2009 |
| Pengjun Huang | 06/01/2009 |
| Christoph A. Joetten | 06/02/2009 |
| Marc W. Werner | 06/02/2009 |
| Wolfgang Granzow | 06/02/2009 |

RECEIVING PARTY DATA

| Name: | QUALCOMM Incorporated | |
|-------------------|--|--|
| Street Address: | 5775 Morehouse Drive | |
| Internal Address: | Patent Department/Central Administration | |
| City: | San Diego | |
| State/Country: | CALIFORNIA | |
| Postal Code: | 92121 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12477561 |

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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

Phone: 858 845-4265

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Address Line 1: 5775 Morehouse Drive

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PATENT

REEL: 022776 FRAME: 0040

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| ATTORNEY DOCKET NUMBER: | 081226U2 |
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| NAME OF SUBMITTER: | Marion Comer De Yoe |
| Total Attachments: 6 source=081226U2_2009-06-03_ASST#pag source=081226U2_2009-06-03_ASST#pag source=081226U2_2009-06-03_ASST#pag source=081226U2_2009-06-03_ASST#pag source=081226U2_2009-06-03_ASST#pag source=081226U2_2009-06-03_ASST#pag | e2.tif e3.tif e4.tif e5.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. Christian Pietsch, a citizen of Germany, having a mailing address of Nordostpark 89, Etage 1 Suite 16, Nuremburg, BA 90411, Germany; and a resident of Neu-Ulm, Bavaria;
- Georg Frank, a citizen of Germany, having a mailing address of Nordostpark 89, Etage 1
 Suite 16, Nuremburg, BA 90411, Germany; and a resident of Nuremberg, Bavaria;
- 3. Christian Sgraja, a citizen of Germany, having a mailing address of Nordostpark 89, Etage 1 Suite 16, Nuremburg, BA 90411, Germany; and a resident of Lauf, Bavaria;
- 4. Pengjun Huang, a citizen of the United States of America, having a mailing address of 5775 Morehouse Drive, San Diego, CA 92121, US; and a resident of San Diego, California;
- Christoph A. Joetten, a citizen of Germany, having a mailing address of Nordostpark 89,
 Etage 1 Suite 16, Nuremburg, BA 90411, Germany; and a resident of Wadem, Saarland;
- 6. Marc W. Werner, a citizen of Germany, having a mailing address of Nordostpark 89, Etage 1 Suite 16, Nuremburg, BA 90411, Germany; and a resident of Nuemberg, Bavaria;
- 7. Wolfgang Granzow, a citizen of Germany, having a mailing address of Nordostpark 89, Etage I Suite 16, Nuremburg, BA 90411, Germany; and a resident of Heroldsberg, Bavaria;

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 SYSTEM AND METHOD OF AN IN-BAND MODEM FOR DATA COMMUNICATIONS OVER DIGITAL WIRELESS COMMUNICATION NETWORKS by us devised and the application

| for United States Patent therefore filed in the United States Patent and Trademark Office on |
|---|
| , and assigned Serial No, (and we hereby authorize and |
| instruct QUALCOMM Incorporated to hereafter complete this Assignment by inserting the filing |
| date and serial number in the space provided when known), including, without limitation, all |
| provisional patent applications, including Provisional Application Number 61/059,179, filed on |
| June 5, 2008, and Provisional Application Number 61/087,923, filed August 11, 2008, and |
| Provisional Application Number 61/093,657, filed September 2, 2008, and Provisional |
| Application No. 61/122,997, filed December 16, 2008, and Provisional Application Number |
| 61/151,457 filed February 10, 2009, and Provisional Application Number 61/166,904, filed April |
| 6, 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 caths 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. |
| Done at Nuremberg, Bavaria, this 2 day of June, 2009. |
| as lital |
| CHRISTIAN PIETSCH |

| Done at Nuremberg, Bavaria, this 2 | _day of |
|-------------------------------------|-------------------|
| | GEORG FRANK |
| Done at Nuremberg, Bavaria, this 2 | Å. |
| | CHRISTIAN & GRAJA |
| Done at San Diego, California, this | day of, 2009. |
| Done at Nuremberg, Bavaria, this | C. Title |
| Done at Nuremberg, Bavaria, this | |
| | MARC W. WERNER |
| Done at Nuremberg, Bavaria, this 2 | • |
| | M. Comme |
| | WOŁPGANG GRANZOW |

PATENT

REEL: 022776 FRAME: 0044

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| CHRISTIAN PIETSCH |
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| Done at Nuremberg, Bavaria, this day of, 2009. |
| Assignment. |
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| countries. |
| assigns and nominees, to obtain and enforce proper patent protection for said invention in all |
| all rightful oaths and generally do everything possible to aid said corporation, its successors, |
| invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make |
| communicate to said corporation or its representatives all facts known to us respecting said |
| rights to said invention, and covenant that we have full right to do so, and agree that we will |
| subject matter of any and all claims which may be obtained in every such patent, and all foreign |
| country), and all divisionals, continuations and continuations-in-part thereof, including the |
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| provisional patent applications, including Provisional Application Number 61/059,179, filed on |
| date and serial number in the space provided when known), including, without limitation, all |
| instruct QUALCOMM Incorporated to hereafter complete this Assignment by inserting the filing |
| , and assigned Serial No, (and we hereby authorize and |
| tor United States Patent therefore filed in the United States Patent and Trademark Office on |

| Done at Nuremberg, Bavaria, this | lay of | | 2009. |
|--|---|--|----------------|
| | | GEORG FRANI | <u> </u> |
| Done at Nuremberg, Bavaria, this | iay of | ······································ | 2009. |
| | ··········· | CHRISTIAN SG | GRAJA |
| Done at San Diego, California, this 1/54 | day of | Jane | _, 2009, |
| | | 1994 | and the second |
| | *************************************** | PENJUNG HUA | |
| Done at Nuremberg, Bavaria, this | day of | | 2009. |
| | | CHRISTOPH A | . JOETTEN |
| Done at Nuremberg, Bavaria, this | lay of | | 2009. |
| | <u></u> | MARC W. WER | INER |
| Done at Nuremberg, Bavaria, this | lay of | ······································ | 2009. |
| | ., | WOLFGANG G | RANZOW |

PATENT REEL: 022776 FRAME: 0047

RECORDED: 06/03/2009