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Attorney Docket No.: 050402

TO: The Commissioner of Patents and Trade

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- New
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Conveying Party(ies)  Mark if additional names are attached

NAME

EXECUTION DATE

Month, Day, Year (MMDDYYYY)

Christopher Edward Koob  
Jian Liang

06/27/2005  
06/27/2005

Receiving Party(ies)  Mark if additional names are attached

Name: QUALCOMM Incorporated  
A Delaware Corporation  
Address: 5775 Morehouse Drive  
Address: San Diego, California, 92121-1714

Correspondence Name and Address

Name: QUALCOMM Incorporated (PTO Customer No. 23696) Telephone Number: (858) 651-1179  
Attn: Patent Department Facsimile: (858) 658-2502  
Address: 5775 Morehouse Drive  
Address: San Diego, California 92121-1714

Pages (Enter the total number of pages of the attached conveyance document including any attachments)

Total number of pages: two

Application Number(s) or Patent Number(s)

If this document is being filed together with a new application, the execution date of the application is:

Patent Application Number(s): 11/170,288 Patent Number(s):

Number of Properties (Enter the total number of properties involved)

Total number of properties: one

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$40

Method of Payment:  Enclosed  Deposit Account (A duplicate of this sheet is enclosed for fee processing)  
Deposit Account Number: 17-0026  
Authorization to charge additional fees:  Yes  No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Date: 7/28/05  
Name: Timothy F. Loomis, Reg. No. 37,383  
858-845-8355

/BY  
KENYON JENCKES  
REG. NO. 41,873

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(TRANSASSIGN.VER1.6-2/12/2001)

PAGE 12/14 \* RCVD AT 7/28/2005 12:52:10 PM [Eastern Daylight Time] \* SVR:USPTO-EFXXF-6/26 \* DNIS:2738300 \* CSID: \* DURATION (mm-ss):03-50

PATENT  
REEL: 016826 FRAME: 0954

ATTORNEY DOCKET NO. 050402

**ASSIGNMENT**

**TO WHOM IT MAY CONCERN:**

For the sum of One Dollar and other valuable consideration to me in hand paid, receipt of which is hereby acknowledged, be it known that We, Christopher Edward Koob, a citizen of the United States, having a place of residence at 2508 Marion Cove, Round Rock, TX 78664, and Jian Liang, a citizen of The Peoples Republic of China, having a place of residence at 8507 Capricorn way #84, San Diego, Ca 92126 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 whole right, title and interest in and to a certain invention relating to:

**SYSTEM AND METHOD OF COUNTING LEADING ZEROS AND COUNTING LEADING ONES IN A DIGITAL SIGNAL PROCESSOR**

by me devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on June 28, 2005, and assigned Serial No. 11/170,288 (and I hereby authorize and instruct QUALCOMM Incorporated to hereafter complete this Assignment by inserting the serial number and filing date in the spaces provided above when known), including, without limitation, all provisional patent applications, and all original and reissue patents granted thereof, and all divisions, and continuations 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 I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to me 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 that may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at Austin, Texas this 27<sup>th</sup> day of JUNE, 2005.

Christopher E. Koob  
Christopher Edward Koob

Done at San Diego, California this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Jian Liang

1 of 1

[Assignment/Sole Inventor with Application]

ATTORNEY DOCKET NO. 050402

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**SYSTEM AND METHOD OF COUNTING LEADING ZEROS AND COUNTING LEADING ONES IN A DIGITAL SIGNAL PROCESSOR**

by me devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on June 23 2005, and assigned Serial No. 111 170,288 (and I hereby authorize and instruct QUALCOMM Incorporated to hereafter complete this Assignment by inserting the serial number and filing date in the spaces provided above when known), including, without limitation, all provisional patent applications, and all original and reissue patents granted thereof, and all divisions, and continuations 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 I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to me 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 that may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at \_\_\_\_\_, Texas this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Christopher Edward Koob

Done at San Diego, California this 27th day of June, 2005.

\_\_\_\_\_  
Jian Liang

1 of 1

[Assignment/Sole Inventor with Application]