

08-29-2003



R SHEET

102537750

Attorney Docket No.: 030285

TO: The Commissioner of Patents and Trademarks. Please record the attached original document(s) or copy(ies).

**Submission Type**

- ☒ New  
☐ Resubmission (Non-Recordation)  
 Document ID No.  
☐ Correction of PTO Error  
 Reel No.                      Frame No.  
☐ Corrective Document  
 Reel No.                      Frame No.

**Conveyance Type**

- ☒ Assignment  
☐ Change of Name  
☐ License  
☐ Merger  
☐ Security Agreement  
☐ Other: \_\_\_\_\_

9.27.03

**Conveying Party(ies)** ☐ Mark if additional names are attached

NAME

**EXECUTION DATE**

Month, Day, Year (MMDDYYYY)

June Namgoong

08/13/2003

Jun Ma

08/13/2003

Mingxi Fan

08/13/2003

Naga Bhushan

08/13/2003

Peter Black

08/14/2003

**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)  
 Attn: Patent Department  
**Address:** 5775 Morehouse Drive  
**Address:** San Diego, California 92121-1714

**Telephone Number:** (858) 658-1179  
**Facsimile:** (858) 658-2502

2003 AUG 27 PM 2:50  
OPR/FINANCE**Pages** (Enter the total number of pages of the attached conveyance document including any attachments)**Total number of pages:** three**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):**

10/456,148

**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):** \$40Method 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: 08/25/03

Name: Kyong Macek, Reg. No. 42,977  
 858-651-5797

Signature:

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08/28/2003 ECDOPER 00000059 170026 10456148

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(TRANSASSIGN.VER1.6-2/14/2001)

**PATENT**  
**REEL: 014426 FRAME: 0232**

## 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 I,

1. **June Namgoong**, a citizen of South Korea, having a place of residence at 10153 Camino Ruiz, #19, San Diego, CA 92126;
2. **Jun Ma**, a citizen of The People's Republic of China, having a place of residence at 10980 Ivy Hill Drive, #6, San Diego, CA 92131;
3. **Mingxi Fan**, a citizen of The United States of America, having a place of residence at 4635 Torrey Circle, Apt. N205, San Diego, CA 92130;
4. **Naga Bhushan**, a citizen of The United States of America, having a place of residence at 7794 Roan Road, San Diego, CA 92129; and
5. **Peter Black**, a citizen of The United States of America, having a place of residence at, 2961 First Avenue, San Diego, CA 92103;


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 a **METHOD AND APPARATUS FOR NEAR-OPTIMAL SCALING OF LIKELIHOOD RATIO (LLR) COMPUTATION IN TURBO DECODING FOR HYBRID AUTOMATIC REPEAT REQUEST (ARQ)** by me co-devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on **June 06, 2003**, and was assigned Serial Number **10/456,148**, 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

## ASSIGNMENT

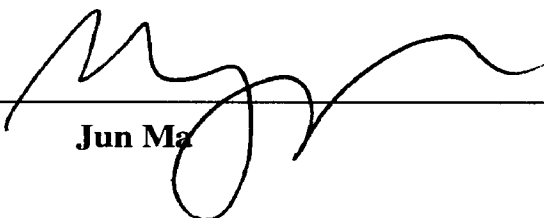
in every such patent, and all foreign rights to said invention, and covenant that I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to me respecting said invention, whenever requested, and testify in any legal proceedings, sign all 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 which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

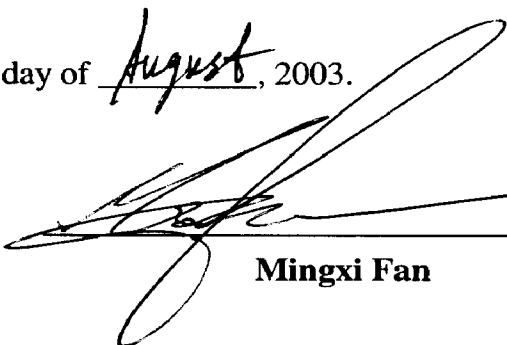
Done at San Diego, California this 13<sup>th</sup> day of Aug, 2003.

  
\_\_\_\_\_  
June Namgoong

Done at San Diego, California this 13<sup>th</sup> day of Aug, 2003.

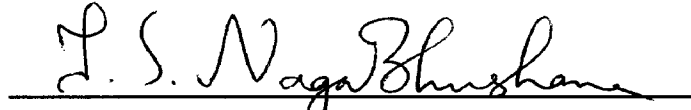
  
\_\_\_\_\_  
Jun Ma

Done at San Diego, California this 13<sup>th</sup> day of August, 2003.


  
\_\_\_\_\_  
Mingxi Fan

## ASSIGNMENT

Done at San Diego, California this 13<sup>th</sup> day of AUG, 2003.

  
\_\_\_\_\_  
**Naga Bhushan**

Done at San Diego, California this 14<sup>th</sup> day of Aug, 2003.

  
\_\_\_\_\_  
**Peter Black**