| FORM PTO-1619A/B 06 - 20   | U.S. Department of Commerce<br>Patent and Trademark Office              |
|--|---|
|  | DATENT  |
|  | EET   |
| 1017   | Attorney Docket No.: 990437   |
|  | 51464 ment(s) or copy(ies).   |
| Submission Type  | Conveyance Type  Assignment Change of Name License Merger               |
| ⊠New<br>  □Resubmission (Non-Recordation)  | Change of Name  |
| Document ID No.  | License   |
| Correction of PTO Error  | ☐Merger   |
| Reel No. Frame No.   | Security Agreement  |
| Reel No. Frame No.  Corrective Document Reel No. Frame No.   | Other:  |
|  |   |
|  | Mark if additional names are attached                                   |
| NAME   | EXECUTION DATE  Month, Day, Year  |
| 1. Judith LaRocca  | 3. Jeffrey A. Levin 1. June 6, 2001 3. June 6, 2001                     |
| 2. A. Chris Irvine   | 2. June 6, 2001   |
| Receiving Party Mark if additional names are attached  |   |
| Name: QUALCOMM Incorporated  | /   |
| A Delaware Corporation   |   |
| Address (Street number and name): 5775 Morehouse D   |   |
| Address (City, State, Zip Code): San Diego, Californ   | nia, 92121-1/14   |
| Correspondent Name and Address Name: QUALCOMM Incorporated   | <b>Telephone Number:</b> (858) 651-1179                                 |
| Attn: Sarah Kirkpatrick, Manager, Intellectual Pro   |   |
| Address: 5775 Morehouse Drive  | , ,   |
| Address: San Diego, California 92121-1714  |   |
| Pages (Enter the total number of pages of the attached con   | veyance document including any attachments)                             |
| Total number of pages: 1  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):  | Patent Number(s):   |
| 1. UNASSIGNED  | 1.  |
| Patent Cooperation Treaty (PCT)  |   |
| (Enter only if a U.S. Application Number has not been assi   |   |
| 1. PCT/ Number of Properties (Enter the total number of properties   | 2. PCT/   |
| Total number of properties: 1  | es involved)  |
|  | ties Listed (37 CFR 3.41): \$40.00                                      |
| Method of Payment: ☐ Enclosed ☐ Deposit Account  |   |
| (Enter for payment by deposit account or if additional fee   | es can be charged to the account. A duplicate of this sheet is enclosed |
| for fee processing)  |   |
| Deposit Account Nur  |   |
|  | rge additional fees: ⊠Yes □ No  |
| Statement and Signature To the best of my knowledge and belief, the foregoing                              | g 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.             |   |
|  | Signature: Source Mix   |
| Date: June 6, 2001   | Name: Sandip (Micky) S. Minhas  |
|  | Registration No. 44,945   |

06/19/2001 AAHNED1 00000010 170006 09876787 01 FC:581 40.00 CH

EXPRESS MAIL LABEL NO. EL842841286US

FOR OFFICE USE ONLY

## 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, **JUDITH LaROCCA**, a citizen of the United States, having a place of residence at 4603 Telescope Avenue, Carlsbad, CA 92008, **A. CHRIS IRVINE**, a citizen of the United States, having a place of residence at 32088 Taliesin Way, Bonsall, CA 92003, and **JEFFREY A. LEVIN**, a citizen of the United States, having a place of residence at 13063 Harwick Lane, San Diego, CA 92130; 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:

## APPARATUS AND METHOD FOR DECODING AND COMPUTING A DISCRETE COSINE TRANSFORM USING A BUTTERFLY PROCESSOR

by us devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on **June 6**, **2001**, and assigned Serial No. \_\_\_\_\_\_\_\_ (and we hereby authorize Qualcomm, Inc. to insert the serial number herein, once assigned), including, without limitation, all provisional patent applications, including Serial No. **60/291,467**, filed **May 16**, **2001**, and all original and reissue patents granted thereof, and all divisions, and continuations 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 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.

Done at San Diego, California this the day of June, 2001.

Judith LaRocca

Done at San Diego, California this 6th day of June, 2001.

A. Chris Irvine

Done at San Diego, California this 6th day of June, 2001.

June, 2001.

June, 2001.

June, 2001.

June, 2001.

1 of 1

PATENT REEL: 011895 FRAME: 0630