PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|---------|----------------|
| Tao Luo | 04/16/2009 |

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: | 12422934 |

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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

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: 081405

NAME OF SUBMITTER: | Gayle Gestick

Total Attachments: 1

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PATENT REEL: 022907 FRAME: 0630

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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,

Tao Luo, a citizen of Canada, having a place of residence at 11002 West Ocean Air Drive #2121, San Diego, California, 92130, United States of America;

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 PHYSICAL HARQ INDICATOR CHANNEL (PHICH) RESOURCE ASSIGNMENT SIGNALING IN A WIRELESS COMMUNICATION ENVIRONMENT by me devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on April 13, 2009, assigned Application Number 12/422,934, including, without limitation, all provisional patent applications, including Provisional Application Number 61/045,215 filed on April 15, 2008, and all original and reissue patents granted thereof (in the United States and any foreign country), 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 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 68 day of 600, 2009.

RECORDED: 07/02/2009

Tao Luo

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