

# PATENT ASSIGNMENT

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| SUBMISSION TYPE:   | NEW ASSIGNMENT                           |                |
| NATURE OF CONVEYANCE:  | ASSIGNMENT                               |                |
| CONVEYING PARTY DATA   |  |                |
| Name   |  | Execution Date |
| Ismail Lakkis  |  | 03/16/2009     |
| RECEIVING PARTY DATA   |  |                |
| Name:  | QUALCOMM Incorporated                    |                |
| Street Address:  | 5775 Morehouse Drive                     |                |
| Internal Address:  | Patent Department/Central Administration |                |
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| State/Country:   | CALIFORNIA                               |                |
| Postal Code:   | 92121                                    |                |
| PROPERTY NUMBERS Total: 1  |  |                |
| Property Type  | Number                                   |                |
| Application Number:  | 12405020                                 |                |
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| ATTORNEY DOCKET NUMBER:  | 082841U2                                 |                |
| NAME OF SUBMITTER:   | Margaret Freda                           |                |
| Total Attachments: 1   |  |                |
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ASSIGNMENT

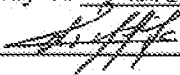
TO WHOM IT MAY CONCERN:

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,

Ismail Lakkis, a citizen of the United States, having a place of residence at 10131 Prairie Springs Road, San Diego, California, 92127, 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 **MULTI-RESOLUTION BEAMFORMING BASED ON CODEBOOKS IN MIMO SYSTEMS** by me devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on March 16, 2008, assigned Application Number 31405,020, including, without limitation, all provisional patent applications, including Provisional Application Number 61/037,139 filed on March 17, 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 16<sup>th</sup> day of March, 2008.

  
Ismail Lakkis