PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jay Rodney Walton	12/20/2006
John W. Ketchum	12/20/2006
Mark S. Wallace	12/20/2006
Steven J. Howard	12/20/2006

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:	12815870

CORRESPONDENCE DATA

(858)658-2502 Fax Number:

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

858-658-5568 Phone:

Email: us-docketing@qualcomm.com QUALCOMM INCORPORATED Correspondent Name:

Address Line 1: 5775 MOREHOUSE DR.

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER: 040057D1C1D1

NAME OF SUBMITTER: Leeanne Lawlor

Total Attachments: 2

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PATENT REEL: 024538 FRAME: 0011

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 Jay Rodney Walton, a citizen of the United States of America having a place of residence at 85 Highwoods Lane, Carlisle Massachusetts 01741, and John W. Ketchum, a citizen of the United States of America having a place of residence at 37 Candleberry Lane, Harvard, Massachusetts 01451, and Mark S. Wallace, a citizen of the United States of America having a place of residence at 4 Madel Lane, Bedford, Massachusetts 01730, and Steven J. Howard, a citizen of the United States of America having a place of residence at 75 Heritage Avenue, Ashland, Massachusetts 01721; 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:

DATA TRANSMISSION WITH SPATIAL SPREADING IN A MIMO COMMUNICATION SYSTEM

by us devised and the application for United States Patent therefore filed in the United States Patent and Trademark Office on December 9, 2004, and assigned Serial No. 11/009,200, 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 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

PATENT REEL: 024538 FRAME: 0012 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 Carlisle, Massachusetts this 20th day of 10c, 2006. Done at Harvard, Massachusetts this 20th day of Dec., 2006. Done at Bedford, Massachusetts this Zoth day of Dec, 2006. Done at Ashland, Massachusetts this 2th day of 22, 2006.

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RECORDED: 06/15/2010