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6-10-03		rney Docket No.: 030121
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1. John Smee		05/29/2003
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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 we, John Smee, a citizen of Canada having a place of residence at 5340 Toscana Way, Apt. F406, San Diego, California 92122; Jay Rod Walton, a citizen of the United States of America having a place of residence at 85 Highwoods Lane, Carlisle, Massachusetts 01741; and Durga Prasad Malladi, a citizen of India having a place of residence at 11983 Briarleaf Way, San Diego, California 92128; 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 a PILOT TRANSMISSION SCHEMES FOR WIRELESS MULTI-CARRIER COMMUNICATION SYSTEMS by us devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on 02/07/2003, and assigned Application Serial No. 10/359,811, 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 successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

1

[030121 ASSN3] Customer No. 23696 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 _	29 day of May, 2003.
	John Smee
Done at Carlisle, Massachusetts thi	s, 2003.
	Jay Rod Walton
Done at San Diego, California this _	29 day of May, 2003. MD Prasa d
	Durga Prasad Malladi

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	day of, 2003.
	John Smee
Done at Carlisle, Massachusetts this	
	Jay Rod Walton
Done at San Diego, California this	day of, 2003.
	Durga Prasad Malladi