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1. Vinay Murthy 04/27/2006	Name: QUALCOMM Incorporated
2. Alok Kumar Gupta 04/28/2006	Internal Address: Patent Department
Execution Date(s) SEE ABOVE  Additional name(s) of conveying party(les) attached? Yes No	Street Address: <u>5775 Morehouse Drive</u>
3. Nature of conveyance:	
✓ Assignment	City: <u>San Diego</u>
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4. Application or patent number(s):  This  A. Patent Application No.(s)  11/371,039  Additional numbers att	document is being filed together with a new application.  B. Patent No.(s)  B. Patent No.(s)  Compared to the property of the
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
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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 VINAY MURTHY, a citizen of the United States of America having a place of residence at 17889 Aguamiel Road, San Diego, CA 92127, and ALOK KUMAR GUPTA, a citizen of India having a place of residence at 1197 Via Di Felicita, Encinitas, CA 92024; 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:

## COURSE TIMING/FRAME ACQUISITION IN OFDM SYSTEM USING TIME DIVISION MULTIPLEXED PILOT SYMBOL

by us devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on March 8, 2006, and assigned Serial No. 11/371,039, including, without limitation, all provisional patent applications, including Serial No. 60/660,915 filed March 11, 2005, 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

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ATTORNEY DOCKET NO. 050570

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 \_\_\_\_\_\_, 2006.

VINAY MURTHY

Done at San Diego, California this \_\_\_\_\_ day of \_\_\_\_\_\_, 2006.

ALOK KUMAR GUPTA

REEL: 017736 FRAME: 0124

ATTORNEY DOCKET NO. 050570

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 28 day of April, 2006.

VINAY MURTHY

Done at San Diego, California this 28 day of April, 2006.

ALOK KUMAR GUPTA

RECORDED: 06/05/2006