FORM PTO-1619A/B	U.S. Department of Commerce
12-1	10-2003 Patent and Trademark Office
PATENT	
TO: The Commissioner of Patents and Trademarks: Please	618579 Attorney Docket No.: 030412
Submission Type New New	Conveyance Type Assignment
Resubmission (Non-Recordation)	Change of Name
Document ID No.	License
Correction of PTO Error	Merger 500
Reel No. Frame No.	Security Agreement
Corrective Document	Other:
Reel No. Frame No. Conveying Party(ies)	Mark if additional names are attached
NAME	EXECUTION DATE
	Month, Day, Year (MMDDYYYY)
1. J. RODNEY WALTON	11/25/2003
2. JOHN W. KETCHUM	11/25/2003
3.	. 7059.11
4.	10725904
Receiving Party	☐ Mark if additional names are attached
Name: QUALCOMM Incorporated A Delaware Corporation	
Address (Street number and name): 5775 Morehou	use Drive
	alifornia, 92121-1714
Correspondent Name and Address	
Name: QUALCOMM Incorporated	Telephone Number: (858) 651-4125
Attn: Patent Dept. Address: 5775 Morehouse Drive	Facsimile: (858) 658-2502
Address: San Diego, California 92121-1714	
Pages (Enter the total number of pages of the attached	d conveyance document including any attachments)
Total number of pages: 3	
	Number(s) or Patent Number(s)
	application, the execution date of the application is: 12/01/2003
Patent Application Number(s): 1.	Patent Number(s): 1.
2.	2.
3.	3.
4.	4.
Patent Cooperation Treaty (PCT)	
(Enter only if a U.S. Application Number has not been assigned)	
1. PCT/ 2. PCT/	3. PCT/ 4. PCT/
Number of Properties (Enter the total number of prop	
Total number of properties: 1	
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$40.00	
Method of Payment: ☐ Enclosed ☐ Deposit Acc	
for fee processing)	nal fees can be charged to the account. A duplicate of this sheet is enclosed
,	nt Number: 17-0026
Authorization to charge additional fees: Yes □ No	
Statement and Signature	
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.	
copy of the original document. Charges to deposit	account are authorized, as indicated herein.
Date: <u>12/01/2003</u>	
Name: Thien T. Nguyen, Reg. No. 43,835	Signature: 1Wh / 1/2/m
(858) 651-6137	
PO	AN OFFICE HELD ONLY
FOR OFFICE USE ONLY	
	Page 1 of <u>1</u>
	1 400 4 01 4

Customer No. 23696

ATTORNEY DOCKET NO.: 030412

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; J. 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; 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:

METHOD AND APPARATUS FOR PROVIDING AN EFFICIENT CONTROL

CHANNEL STRUCTURE IN A WIRELESS COMMUNICATION SYSTEM

by us devised and the application for United States Patent therefor filed HEREWITH in the

United States Patent and Trademark Office, 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 successors, assigns and nominees, to obtain and enforce proper patent protection

1

[Assignment/Multiple With Application]

PATENT REEL: 014759 FRAME: 0713 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 <u>25</u> day of <u>Nov</u>, 2003.

J. RODNEY WALTON

Done at Harvard, Massachusetts this 25^{+} day of $\sqrt{0}$, 2003.

JOHN W. KETCHUM

RECORDED: 12/01/2003