FORM PTO-1619A/B	05-21-2003  U.S. Department of Commerce Patent and Trademark Office
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	Attorney Docket No.: 030054
TO: The Commissioner of Patents and Fradem	102452925t(s) or copy(ies).
Subinission Type	Conveyance Type
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Conveying Party(ies)	Mark if additional names are attached
NAME	EXECUTION DATE
1. Avneesh Agrawal	02/19/2003
2. Rajiv Vijayan	02/14/2003
3. Famer Kadous	02/14/2003
Receiving Party	Mark if additional names are attached
Name: QUALCOMM Incorporated A Delaware Corporation	
Address (Street number and name): 5775 Morel	nouse Drive
,	California, 92121-1714
Correspondent Name and Address	
Name: QUALCOMM Incorporated	<b>Telephone Number:</b> (858) 651-1179
Attn: Sarah Kirkpatrick, Manager, Intellect Address: 5775 Morehouse Drive	etual Property Administration Facsimile: (858) 658-2502
Address: San Diego, California 92121-1714	
	hed conveyance document including any attachments)
Total number of pages: 4	
	on Number(s) or Patent Number(s) w application, the execution date of the application is:
Patent Application Number(s):	Patent Number(s):
1. 10/367,234	1.
Patent Cooperation Treaty (PCT)	
(Finter only if a U.S. Application Number has not be 1. PCT/	een assigned)  2. PCT/
Number of Properties (Enter the total number of p	
Total number of properties: 1	
•	Properties Listed (37 CFR 3.41): \$40.00
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Statement and Signature  To the best of my knowledge and belief, the fo	oregoing information is true and correct and any attached copy is a true
copy of the original document. Charges to depos	
1	
	$\mathcal{A} \cap \mathcal{A} = \mathcal{A} \cap \mathcal{A}$
Date: May 14, 2003	Signature: 30,580
Name: Sandip (Micky) S. Minhas	Registration No. 44,945
Name: Sandip (Micky) S. Minhas	Registration No. 44,945 FOR OFFICE USE ONLY
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Name: Sandip (Micky) S. Minhas	Registration No. 44,945  FOR OFFICE USE ONLY  I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for
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Name: Sandip (Micky) S. Minhas  20/2003 TBIAZ1 00000052 170026 10367234	Registration No. 44,945  FOR OFFICE USE ONLY  I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on:  May 14, 2003  (Date of Deposit)
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Page 1 of 1

**PATENT** 

**REEL: 014073 FRAME: 0353** 

## 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 Avneesh Agrawal, a citizen of India having a place of residence at 809 Pitkin Loop, San Jose, CA 95125, Rajiv Vijayan, a citizen of India having a place of residence at 9604 Babauta Rd., San Diego, CA 92129, Tamer Kadous, a citizen of Egypt having a place of residence at 5385 Toscana Way, #316, San Diego, CA 92122; 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 Rate Adaptive Transmission Scheme For MIMO Systems by us devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on February 14, 2003, and assigned Serial No. 10/367,234 (and we hereby authorize and instruct QUALCOMM, Incorporated to hereafter complete this Assignment by inserting the application serial number and filing date of said application in the space provided above when known), 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.

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PATENT REEL: 014073 FRAME: 0354 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 Jose, California this 19th day of Feb., 2003.

Avneesh Agrawal

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030054

Done at San Diego, California this 14 day of FEBRUARY 2003.

Kanv vijayan

Done at San Diego, California this 14 day of Feb., 2003.

Tamer Kadous

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**RECORDED: 05/19/2003** 

030054

**PATENT** REEL: 014073 FRAME: 0357