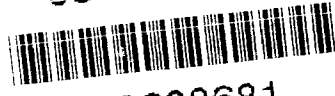


BOX ASSIGNMENTS



03-15-2004

DO NOT USE FOR TRADEMARKS



102693681

TO THE ASSISTANT COMMISSIONER OF PATENT AND TRADEMARK OFFICE
SIR: PLEASE RECORD THE ATTACHED ORIGINAL

1. NAME OF CONVEYING PARTY(IES) (ASSIGNOR(S)):

- a. Won Joon Choi
- b. Ardavan M. Tehrani
- c. Jeffrey M. Gilbert
- d. Samuel Ng

3/8/04

ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED? YES NO

2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:

ATHEROS COMMUNICATIONS, INC
529 Almanor Street
Sunnyvale, California 94085

ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES NO

3. NATURE OF CONVEYANCE (DOCUMENT):

(Submit herewith only one document for recordation—multiple copies of same Assignment signed by different inventors is one document)

- ASSIGNMENT OF WHOLE PATENT APPLICATION
- ORIGINAL FACSIMILE/PHOTOCOPY
- NAME CHANGE VERIFIED TRANSLATION
- SECURITY MERGER OTHER:

EXEC. DATE:
February 23, 2004

EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (**NOTE:** IF DATES ON DECLARATION AND ASSIGNMENT DIFFER SEE ATTY!)

4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL SHEET(S) attached? YES NO

A. PAT. APP. NO.(S) Serial No.	FILING DATE	1* INVENTOR if not in item 1	B. PATENT NO.(S)	1* INVENTOR if not in item 1
10/682,381	October 8, 2003			

5. Name & Address of Party to Whom Correspondence Concerning Document Should be Mailed:

David A. Jakopin
Pillsbury Winthrop LLP
2475 Hanover Street
Palo Alto, CA 94304

6. NUMBER INVOLVED:
APPLNS 1 + PATS 0 = TOTAL 1

7. AMOUNT OF FEE = \$40 charge to deposit account
03-3975 (Order No. 073169-0293448)

IF FEE IS REQUIRED CHARGE TO
DEPOSIT ACCOUNT 03-3975
(Order No. 073169/0293448)

03/12/2004 DBYRNE 00000148 033975 10682381

01 FC-0021 40.00 BA
MATTER NO.
073169/0293448

CLIENT REF.
ATH-103

dup. sheet not required

9. STATEMENT AND SIGNATURE. To the best of my knowledge and belief, the foregoing information is true and correct.

Signature

David A. Jakopin, Reg. No. 32,995

10. Total number of pages including this cover sheet, attachments and document (do not file dup. Cover sheet)	2
---	---

Date: **March 1, 2004**

Atty/Sec: DAJ:kms
60354064

650-233-4575

FAX: (650) 233-4545

ASSIGNMENT
of U.S. Origin Patent Application

WHEREAS, the undersigned, **Won-Joon Choi, Ardavan M. Tehrani, Jeffrey M. Gilbert and Samuel Ng** have made an invention entitled ***Apparatus and Method of Multiple Antenna Transmitter Beamforming of High Data Rate Wideband Packetized Wireless Communication Signals*** for which an application for Letters Patent of the United States was filed in the United States Patent and Trademark Office on October 8, 2003, under Serial No. 10/682,381 and

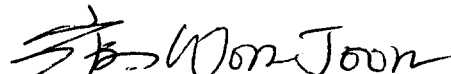

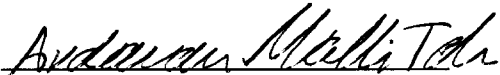
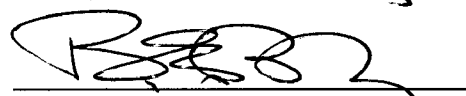
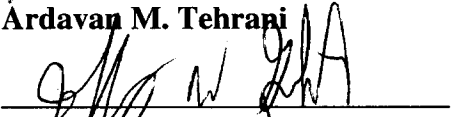

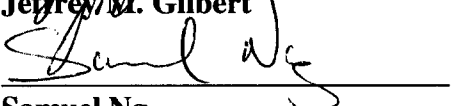
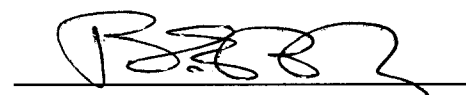
WHEREAS, **ATHEROS COMMUNICATIONS, INC.** (hereinafter ASSIGNEE), a body having corporate powers under the laws of the State of Delaware, whose principal office and place of business is at, 529 Almanor Avenue, Sunnyvale, California 94085, desires to acquire an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said ASSIGNORS do hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNORS hereby authorize and request the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

AND ASSIGNORS hereby agree to execute any papers requested by ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

ASSIGNORS furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

Executed on the date below indicated.

<u>Signature</u>	<u>Date Signed</u>	<u>Witness</u>
 _____ Won-Joon Choi	2/23/04	 _____
 _____ Ardavan M. Tehrani	4/23/04	 _____
 _____ Jeffrey M. Gilbert	2/23/04	 _____
 _____ Samuel Ng	2/23/04	 _____