

01-29-2004



Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)

102656494 COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

<p>1. Name of conveying party(ies): Metawave Communications Corporation</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies)</p> <p>Name: <u>Kathrein-Werke KG</u></p> <p>Internal Address: _____</p> <p>Street Address: _____</p> <p>Antonkathrein Strasse 1-3 P. O. Box 100444 ED-83 004</p> <p>City: <u>Rosenheim</u></p> <p>State: <u>Germany</u> Zip: _____</p> <p>Additional name(s) & address(es) attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of Conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: <u>September 19, 2003</u></p>	

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the new application is: _____

<p>A. Patent Application No.(s): <u>09/641,432</u></p>	<p>B. Patent No.(s): _____</p>
<p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	

OPR/FINANCE JAN 23 AM 8:59

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>R. Ross Viguet</u> <u>FULBRIGHT & JAWORSKI L.L.P.</u></p> <p>Internal Address: <u>Atty. Dkt.: 65948-G99999-10313881</u></p> <p>Street Address: <u>2200 Ross Avenue, Suite 2800</u></p> <p>City: <u>Dallas</u> State: <u>TX</u> Zip: <u>75201-2784</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u></p> <p><input type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p><input type="checkbox"/> Authorized to be charged to credit card (Form 2038 enclosed)</p> <p>8. Deposit account number: <u>06-2380</u> (Attach duplicate copy of this page if paying by deposit account)</p>
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9. 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.

R. Ross Viguet [Signature] January 21, 2004
Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments, and documents: 9

Recordation Form Cover Sheet

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Assignment Recordation Services, Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: January 21, 2004 Signature: [Signature] (Carrie Wilson)

01/28/2004 ECDOPER 00000216 062380 09641432
01 FC:8021 25375748.1

PATENT REEL: 014915 FRAME: 0105

ASSIGNMENT

This Assignment ("Assignment") is made and entered into as of the 19th day of September, 2003, by Metawave Communications Corporation, a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 15231 NE 95th Street, Redmond, Washington 98052 ("Assignor") and Kathrein-Werke KG, a corporation organized and existing under the laws of the Federal Republic of Germany, having its principal place of business at Antonkathrein Strasse 1-3, P.O. Box 100444 ED-83 004 Rosenheim, Germany ("Buyer").

RECITALS

A. Assignor is a debtor in Chapter 11 Bankruptcy Case 03-11272 pending before the United States Bankruptcy Court for the Western District of Washington (the "Court").

B. Assignor is operating its business as a debtor-in-possession pursuant to Section 1107 of the Bankruptcy Code;

C. Assignor and Buyer are parties to that certain Asset Purchase And Sale Agreement (the "Purchase Agreement") dated as of June 27, 2003.

D. Pursuant to that certain Order (A) Authorizing Sale of Certain Intellectual Property Assets Pursuant to Bankruptcy Code Section 363(B), and (B) Approving Overbid And Auction Procedures dated July 25, 2003 (the "Order") the Court authorized the Assignor to consummate the transactions contemplated by the Purchase Agreement (as amended pursuant to the Order).

E. Subject to the limitations set forth in the Purchase Agreement, Assignor owns or may assert a claim to all or to a portion of the worldwide right, title, and interest in and to the following (hereinafter the "Acquired Patent Assets"):

- (a) the patents and patent applications listed on Exhibit A hereto and the corresponding provisional applications and other parent applications, if any, and all continuations, continuations-in-part, divisionals, reissues, reexaminations and the like in the United States and all patents, patent applications, utility model applications, registrations and the like in other countries worldwide that correspond to any of them, including at least, but not necessarily being limited to, the patents and patent applications listed on Exhibit B hereto, where a patent, patent application, utility model, registration or the like in a foreign country corresponds to a U.S. patent application or patent if either (i) it claims the priority benefit of the filing date of the U.S. patent application or (ii) it was filed by or for Assignor or a person or entity affiliated with Assignor and claims or discloses the same invention as the U.S. patent application or patent (the "Patents");
- (b) the worldwide right to claim domestic and international priority to any and all of the aforesaid patents, patent applications, utility model applications, registrations and the like;
- (c) the patentable inventions of Assignor disclosed or claimed in any of the aforesaid patents, patent applications, utility model applications, registrations and the like;
- (d) the worldwide right (but not the obligation) to prosecute any or all of the aforesaid applications, registrations and the like; and
- (e) the worldwide right (but not the obligation) to enforce any or all of the aforesaid patents, patent applications, utility model applications, registrations and the like, and collect and retain for itself damages, if any, for infringement by any third parties which infringement occurred prior to or after the date hereof.

C. Pursuant to the terms of the Purchase Agreement, Assignor desires to transfer all of its claims, right, title and interest worldwide to any and all of the Acquired Patent Assets to Buyer, and Buyer desires to secure same.

NOW, THEREFORE, in consideration of \$10.00 and other good and valuable consideration paid to Assignor by Buyer, the receipt and sufficiency of which Assignor hereby acknowledges:

1. Assignment. Assignor hereby assigns to Buyer its entire claim, right, title, and interest worldwide in and to the *Acquired Patent Assets* and any and all portions and parts thereof. Buyer hereby receives and accepts from Assignor such claim, right, title, and interest worldwide in and to the *Acquired Patent Assets* and any and all portions thereof.

2. Miscellaneous

2.1 Assignor hereby authorizes and requests the United States Commissioner of Patents, and such patent office officials in any and all other countries worldwide as are duly authorized by their applicable laws to issue any and all patents on the inventions which are claimed or disclosed in the *Acquired Patent Assets* (the "*Inventions*") to Buyer as the owner of Assignor's entire claim, right, title, and interest worldwide in and to the *Acquired Patent Assets* and any and all portions and parts thereof for the sole use and benefit of Buyer, its successors, assigns and legal representatives.

2.2 Assignor hereby agrees, without further consideration and without expense to it, to sign all lawful papers and to perform all other lawful acts which Buyer may request to make this assignment fully effective, including, by way of example but not of limitation, the following:

(a) Prompt execution of all original, continuation, continuation-in-part, divisional, substitute, reissue, re-examination and other United States and foreign patent applications on the *Inventions*, and all lawful documents requested by Buyer to further the prosecution of any of the patents, patent applications, utility model applications, registrations and the like of the *Acquired Patent Assets*; and

(b) Cooperation to the best of its ability in the execution of all lawful documents, the production of evidence, and the prosecution or defense, as the case may be, of nullification, reissue, extension, interference or infringement proceedings involving any of the *Inventions*.

2.3 No party hereto shall be deemed to be the representative, partner, joint-venturer, or agent of any other party hereto by virtue of this Assignment; provided, however, that in the event Assignor is unwilling, unable or unavailable to sign lawful papers or to perform other lawful acts pursuant to section 2.2 of this Assignment to make this Assignment effective for the *Acquired Patent Assets* or any portion or part thereof in any country, Assignor hereby irrevocably and permanently appoints and authorizes Buyer to sign such papers and to perform such other lawful acts as and on behalf of Assignor worldwide to the extent doing so is not unlawful under applicable laws of such jurisdiction.

2.4 This Assignment may be amended, modified, superseded, canceled, renewed, or extended and the terms and conditions hereof may be waived only by a written instrument signed by the parties or, in the case of a waiver, by the party waiving compliance.

2.5 This Assignment shall be governed by and construed in accordance with United States federal law and with the laws of the State of Washington without regard to its choice of law provisions.

2.6 In the event that any condition, covenant, or other provision herein contained is held to be invalid or unenforceable by any court of competent jurisdiction, the same shall be deemed severable from the remainder of this Assignment and shall in no way affect any other covenant, condition or other provision herein contained. If such condition, covenant or other provision shall be deemed

ASSIGNMENT

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PATENT
REEL: 014915 FRAME: 0107

I hereby certify, that the above are the true signatures, acknowledged in my presence by

Mr. Alois Trepesch,
and Mr. Harald Maroldt,
Germany, 83022 Rosenheim, Anton-Kathrein-Str. 3,
their identity having confirmed to me by Mrs. Gabriele Dobler, employee at this office, who is personally known to me.

Upon my inspection of the commercial register on December the 8nd of 2003, i further certify that

**Kathrein-Werke KG
in Rosenheim**

is registered with the municipal Court of Traunstein-Commercial Register, No HRA 460 and that Mr. Trepesch and Mr. Maroldt are entitled to act as this company's legal representatives.

Rosenheim, on December the 8th of 2003

Hagmaier

Thomas Hagmaier, substitute deputy of
Dr. Sebastian Spiegelberger, notary public,
Kufsteiner Str. 9/11, 83022 Rosenheim

EXHIBIT A of ASSIGNMENT

UNITED STATES PATENTS AND PATENT APPLICATIONS

Metawave Patent ID	Status	Patent/ Application No.	Patent/Application Title
D001US	Issued	D390,566	Multiple Beam Antenna (Design Cylinder)
D002US	Issued	D390,568	Multiple Beam Antenna (Design Hexagon)
D003US	Issued	D390,569	Multiple Beam Antenna (Design Dodecagon)
P001C1	Issued	5,757,318	Narrow Beam Wireless Systems with Angularly Diverse Antennas
P001C1CP1	Issued	6,005,516	Diversity Among Narrow Antenna Beams
P001C1CP1CP1	Issued	6,351,237	Polarization and Angular Diversity Among Antenna Beams
P001CP1	Issued	5,648,968	Narrow Beam Antenna Systems with Angular Diversity
P001US	Issued	5,563,610	Narrow Beam Antenna Systems with Angular Diversity
P002US	Issued	5,859,854	System and Method for Frequency Multiplexing Antenna Signals
P003US	Issued	5,884,147	Method and Apparatus for Improved Control Over Cellular Systems
P004C1	Issued	6,032,056	Cellular System Signal Conditioner
P004US	Issued	5,781,864	Cellular System Conditioner Which Overrides a Disconnect for Active Radios Wirelessly Communicating with Mobiles Located in Pre-Identified Territorial Positions
P005US	Issued	5,745,841	System and Method for Cellular Beam Spectrum Management
P006CP2	Issued	5,872,547	Conical Omni-Directional Coverage Multibeam Antenna with Parasitic Elements
P006CP3	Issued	6,094,166	Conical Omni-Directional Coverage Multiple-Beam Antenna with Parasitic Elements
P006CP3CP1	Issued	6,188,373	System and Method for Per Beam Elevation Scanning
P006D1	Issued	6,172,654	Conical Omni-Directional Coverage Multibeam Antenna
P006US	Issued	5,940,048	Conical Omni-Directional Coverage Multibeam Antenna
P007US	Issued	6,072,788	Forward Link TDMA Power Control System and Method
P010CP1	Issued	6,246,674	Antenna Deployment Sector Cell Shaping System and Method
P010CP2	Issued	6,198,435	System and Method for Improved Trunking Efficiency Through Sector Overlap
P010US	Issued	5,889,494	Antenna Deployment Sector Cell Shaping System and Method
P011US	Issued	5,969,689	Multi-Sector Pivotal Antenna System and Method
P012US	Issued	5,929,823	Multiple Beam Planar Array with Parasitic Elements
P013US	Issued	6,363,263	Universal Wideband Switchless Channel Selector
P014D1	Issued	6,236,849	System and Method of Determining a Mobile Station's Position Using Directable Beams
P014US	Issued	6,195,556	System and Method of Determining a Mobile Station's Position Using Directable Beams
P015US	Issued	5,955,920	Signal Feed Matrix LPA Reduction System and Method
P017US	Issued	6,061,548	TDMA Repeater Eliminating Feedback
P018US	Issued	5,917,371	Signal Feed Matrix Amplifier Reduction System and Method
P019US	Issued	6,055,230	Embedded Digital Beam Switching
P020US	Issued	6,070,090	Input Specific Independent Sector Mapping
P021US	Issued	6,141,565	Dynamic Mobile Parameter Optimization
P022US	Issued	6,118,767	Interference Control for CDMA Networks Using a Plurality of Narrow Antenna Beams and an Estimation of the Number of Users/Remote Signals Present

Merawave Patent ID	Status	Patent/ Application No.	Patent/Application Title
P023US	Issued	6,133,868	System and Method for Fully Self-Contained Calibration of an Antenna Array
P024US	Issued	6,178,333	System and Method Providing Delays for CDMA Nulling
P025US	Issued	6,181,276	Sector Shaping Transition System and Method
P026US	Issued	6,320,540	Establishing Remote Beam Forming Reference Line
P028US	Issued	6,405,018	Indoor Distributed Microcell
P029US	Issued	6,243,038	System and Method Providing Amplification of Narrow Band Signals with Multi-Channel Amplifiers
P030US	Issued	6,522,897	RF Radiation Pattern Synthesis Using Existing Linear Amplifiers
P031US	Issued	6,515,616	System and Method for Aligning Signals Having Different Phases
P032US	Issued	6,198,434	Dual Mode Switched Beam Antenna
P033US	Issued	6,268,828	Cylindrical Antenna Coherent Feed System and Method
P034US	Issued	6,356,166	Multi-Layer Switched Line Phase Shifter
P035US	Issued	6,317,100	Planar Antenna Array with Parasitic Elements Providing Multiple Beams of Varying Widths
P038US	Issued	6,463,303	Beam Forming and Switching Architecture
P042US	Issued	6,429,825	Cavity Slot Antenna
P047US	Issued	6,320,853	Method of Phase Recovery in Cellular Communication Systems
P049CP1	Issued	6,347,234	Practical Space-Time Radio Method For CDMA Communication Capacity Enhancement
P049CP1CP2	Issued	6,519,478	Compact Dual-Polarized Adaptive Antenna Array Communication Method and Apparatus
P049US	Issued	6,108,565	Practical Space-Time Radio Method for CDMA Communication Capacity Enhancement
P051US	Issued	6,233,466	Downlink Beamforming Using Beam Sweeping and Subscriber Feedback
P054US	Issued	6,330,460	Simultaneous Forward Link Beam Forming and Learning Method for Mobile High Rate Data Traffic
P058US	Issued	6,501,747	Manifold Assisted Channel Estimation and Demodulation for

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P037US	Pending	09/641,432	System and Method for Delay Equalization of Multiple Transmission Paths
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Metawave Patent ID	Status	Patent/ Application No.	Patent/Application Title
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EXHIBIT A of ASSIGNMENT
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