

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

Assignment ID: PATI384365

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	Metawave Corporation	02/29/2024
RECEIVING PARTY DATA		
Company Name:	BDCM A2 LLC	
Street Address:	850 New Burton Road, Suite 201	
City:	Dover	
State/Country:	DELAWARE	
Postal Code:	19904	
PROPERTY NUMBERS Total: 2		
Property Type	Number	
Application Number:	17143151	
Application Number:	18783000	
CORRESPONDENCE DATA		
Fax Number:	5139778141	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Phone:	(513)977-8792	
Email:	camryn.hemmelgarn@dinsmore.com,gregory.wuennenberg@dinsmore.com	
Correspondent Name:	Dinsmore & Shohl LLP	
Address Line 1:	255 East Fifth Street, Suite 1900	
Address Line 4:	Cincinnati, OHIO 45202	
ATTORNEY DOCKET NUMBER:	BMD0259	
NAME OF SUBMITTER:	Camryn Hemmelgarn	
SIGNATURE:	Camryn Hemmelgarn	
DATE SIGNED:	07/24/2024	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 6		
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ASSIGNMENT OF IP RIGHTS

WHEREAS:

	Assignor Name	Address
1	Metawave Corporation	5993 Avenida Encinas, Suite 101 Carlsbad, California 92008 United States

(hereinafter referred to as the Assignor) is the owner of the entire right, title, and interest in Intellectual Property including, but not limited to, issued patents, pending patent applications, inventions, invention disclosures, trademarks, trade secrets, design know how, product design, prototype design, and engineering design, know-how, developed code, and developed software, including at least those assets listed in **Table 1** (included herewith), collectively referred to as the "Assigned IP,"

AND

Assignee Name	Address
BDCM A2 LLC	850 New Burton Road, Suite 201 Dover, Delaware 19904 United States

(hereinafter referred to as Assignee), is desirous of acquiring the entire right, title, and interest in and to the Assigned IP, including at least: (1) all applications for intellectual property rights; (2) all issued or granted intellectual property rights; (3) the one or more inventions described in the patent applications and/or the patents; (4) all embodiments of the invention(s) heretofore conceived, made or discovered by the Assignor; and (5) any and all patents, inventor certificates, registrations, and other forms of protection granted based on the patent applications, issued patents, and/or inventions in any and all countries and groups of countries throughout the world.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by the Assignor as having been received in full from the Assignee:

1. The Assignor hereby sells, assigns, transfers, and conveys without limitation to the Assignee the full and exclusive right, title, and interest in and to the Assigned IP in any and all countries and groups of countries, including any provisional, non-provisional, conventional, divisional, continuation, substitution, reissue, reexamination, or extension of any application for intellectual property rights and any issued or granted intellectual property rights.

2. The Assignor hereby covenants and agrees to cooperate with the Assignee to enable the Assignee to enjoy to the fullest extent the right, title, and interest to the Assigned IP herein conveyed in any and all countries and groups of countries. Such cooperation by the Assignor shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations, or other documents, and other assistance all to the extent deemed necessary or desirable by the Assignee (a) for perfecting in the Assignee the right, title, and interest herein conveyed; (b) for prosecuting any of the applications for intellectual property rights; (c) for filing and prosecuting any provisional, non-provisional, conventional, divisional, continuation, substitution, reissue, reexamination, or extension of any application for intellectual property rights and any issued or granted intellectual property rights; (d) for conducting interference or other priority proceedings involving any application for intellectual property rights and any issued or granted

intellectual property rights (e) for legal proceedings involving any application for intellectual property rights and any issued or granted intellectual property rights, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions, and court actions; provided, however, that the expense incurred by the Assignor in providing such cooperation shall be paid for by the Assignee.

3. The terms and covenants of this agreement shall inure to the benefit of the Assignee, its successors, assigns and other legal representatives, and shall be binding upon the Assignor, their respective heirs, legal representatives, and assigns.

4. The Assignor hereby warrants and represents that they have not entered into and will not enter into any assignment, contract, agreement, or understanding in conflict herewith.

IN WITNESS WHEREOF, the Assignor has executed and delivered this instrument to the Assignee on the dates indicated below.

2/29/2024

(DATE)

William R. Ayres

W.R. Ayres

W.R. Ayres Consulting, LLC, by W.

Robert Ayres, Solely in its Capacity as the
Assignee for the Benefit of Creditors of
Metawave Corporation

Table 1

Application No. / Patent No.	Title
US 18/456387	Sensor Fusion Scanning System And Method For Wireless Network Planning
US 17/046288	Method And Apparatus For Object Detection Incorporating Metamaterial Antenna Side Lobe Features
EP 21745040.2	Reflectarray Antenna With Two-Dimensional Beam Scanning
US 17/216342	Method And Apparatus For Radar Infrastructure
US 17/824873	Distributed Radar System With Active Tags For Precise Geolocation
US 16/775205	Radar System With Three-Dimensional Beam Scanning
US 17/778807	Reflectarray Antenna With Two-Dimensional Beam Scanning
US 17/181939	Modular, Multi-Channel Beamformer Front-End Integrated Circuits For Millimeter Wave Applications
US 18/460386	Smart Infrastructure Sensing And Communication System
US 17/347012	Method And Apparatus For Non-Line Of Sight Radar
US 17/006701	Real-Time Calibration Of A Phased Array Antenna Integrated In A Beam Steering Radar
JP 2023-069484	Metawave & Design (B&W)
US 17/177137	Intelligent Metamaterial Radar For Target Identification
CN 202180083489.1	Reflectarray And Method Therefor
CN 202180086003.X	A Multi-Layered Structure Having Antipad Formations
US 17/862954	Hybrid Analog And Digital Beamforming
US 18/215661	Beam Steering Radar With Adjustable Long-Range Radar Mode For Autonomous Vehicles
US 18/462268	Reconfigurable Radio Frequency Front End For A Radar System
US 17/361214	Method And Apparatus For Object Detection With Integrated Environmental Information
US 17/738812	Method And Apparatus For RF Built-In Test System
US 17/047965	Distributed Varactor Network With Expanded Tuning Range
US 17/627121	Phased Array Antenna Calibration System And Methods For Use In Millimeter Wave Applications
US 17/143147	Angular Resolution Refinement In A Vehicle Radar For Object Identification
US 18/505609	Multi-Sensor Fusion Platform For Bootstrapping The Training Of A Beam Steering Radar
US 16/813640	Simultaneous Localization And Mapping And Neural Network System

US 16/591506 US 11,921,233	Adaptive Radar For Near-Far Target Identification
US 17/614196	Guard Band Antenna In A Beam Steering Radar For Resolution Refinement
US 17/163191	GAN-Based Data Synthesis For Semi-Supervised Learning Of A Radar Sensor
US 18/114841	Beamformer RFIC Calibration Method Therefor
US 17/489588	Method And Apparatus For A Chirp Generator In A Radar System
US 18/453218	Switched Coupled Inductance Phase Shift Mechanism
US 18/453187	Method And Apparatus For Object Alert For Rear Vehicle Sensing
US 17/393262	Pipelined FFT With Localized Twiddle
TW I717612	Intelligent Antenna Metamaterial Method And Apparatus
US 17/899208 US 11,921,213	Non-Line-Of-Sight Correction For Target Detection And Identification In Point Clouds
US 17/433194	Switchable Reflective Phase Shifter For Millimeter Wave Applications
US 17/143151	Amplitude Tapering In A Beam Steering Vehicle Radar For Object Identification
CA 3129038	Method And Apparatus For Electromagnetic Transmission Attenuation Control
EP 20751969.5	Method And Apparatus For Electromagnetic Transmission Attenuation Control
US 17/033356	Stripline Feed Distribution Network With Embedded Resistor Plane For Millimeter Wave Applications
EP 19746621.2	Method And Apparatus For Object Detection Using A Beam Steering Radar And Convolutional Neural Network System
US 18/510064	Method And Apparatus For Object Detection Using A Beam Steering Radar And A Decision Network
US 18/511149	Calibration Method And Apparatus
US 17/337318	Frequency Offset Using SiGe Phase Shifters
EP 20382077.4	Reflectarray Antenna For Enhanced Wireless Communication Coverage Area
US 18/511332	Power Control To A Beam Steering Phased Array Antenna In Satellite Applications
US 17/738784	Hybrid Sparse Subarray Design For Four-Dimensional Imaging Radar
US 18/517493	Active Redirection Devices For Wireless Applications
US 17/627106	Scanning System For Enhanced Antenna Placement In A Wireless Communication Environment
US 17/634925	Meta-Structure Wireless Infrastructure For Beamforming Systems

US 10741917	Power Division In Antenna Systems For Millimeter Wave Applications
US 10739438	Super-Resolution Radar For Autonomous Vehicles
US 18/520319	Side Lobe Reduction In A Beam Steering Vehicle Radar Antenna For Object Identification
US 17/313914	Feed Structure For A Metamaterial Antenna System
US 17/313930	Intelligent Metamaterial Radar Having A Dynamically Controllable Antenna
US 16/240666	Method And Apparatus For Object Detection Using Convolutional Neural Network Systems
US 18/528641	Continuous Visualization Of Beam Steering Vehicle Radar Scans
US 18/528631	Hybrid Beam Steering Radar
US 18/529580	Optimized Proximity Clustering In A Vehicle Radar For Object Identification
US 18/112477	Super-Resolution Radar For Autonomous Vehicles
US 18/112484	Motion-Based Object Detection In A Vehicle Radar Using Convolutional Neural Network Systems
US 17/678000	Meta-Structure Based Reflectarrays For Enhanced Wireless Applications
US 17/429326	Method And Apparatus For Electromagnetic Transmission Attenuation Control
US 17/001541	Hybrid Radar And Camera Edge Sensors
CA 3131523	Switchable Reflective Phase Shifter For Millimeter Wave Applications
EP 20762142.6	Switchable Reflective Phase Shifter For Millimeter Wave Applications
US 18/529538	Virtual Beam Steering Using MIMO Radar
US 18/071550	Radar System For Internal And External Environmental Detection
US 16/517525	Method And Apparatus For Wireless Systems
US 17/775747	Two-Dimensional Radar For Millimeter Wave Applications
CA TMA1094952	Metawave
US 10771124	Virtual Beam Steering Using MIMO Radar
EP 19787915.8	Meta-Structure Antenna System For New Generation Wireless Networks In Moving Vehicles
US 17/619905	Beam Steering Radar With Selective Scanning Mode For Autonomous Vehicles
US 17/204655	Continuously Steering Phased Array And Headlight Radars
WO 1464046	Marconi
US 17/003887	Antenna Array With Amplitude Tapering And Method Therefor

US 63/453973	Phase Invariant Variable Gain Amplifier For A Wireless System
JP 6367357	Spektra
US 17/973385	Geographically Disparate Sensor Fusion For Enhanced Target Detection And Identification In Autonomous Vehicles
US 97/453223	Metawave
US 97/453220	Metawave & Design (B&W)
EP 19785856.6	Method And Apparatus For Object Detection Incorporating Metamaterial Antenna Side Lobe Features
EP 21881120.6	Reflectarray And Method Therefor
WO 1466663	Turbo
CA TMA1098502	Metawave & Design (Color)
EP 3782229	Method And Apparatus For Radiating Elements Of An Antenna Array
GB 3782229	Method And Apparatus For Radiating Elements Of An Antenna Array
MX 2233953	Klone
CN 202080012882.7	Method And Apparatus For Electromagnetic Transmission Attenuation Control
EP 21883904.1	A Multi-Layered Structure Having Antipad Formations
PCT/US2022/047740	Sparse MIMO Phased Array Imaging Radar
CA 3102448	Intelligent Antenna Metamaterial Method And Apparatus
EP 18813106.4	Intelligent Antenna Metamaterial Method And Apparatus
EP 20888539.2	Two-Dimensional Radar For Millimeter Wave Applications
PCT/EP2022/083150	Passive Reflectarray Panel For Enhanced Wireless Communication In Near Field Coverage Area And Methods Of Designing The Same
US 10854985	Smart Infrastructure Sensing And Communication System
EP 20815018.5	Meta-Structure Based Reflectarrays For Enhanced Wireless Applications
EP 20819153.6	Guard Band Antenna In A Beam Steering Radar For Resolution Refinement
CA 1957875	Turbo
US 88/745866	Metawave Spektra Radar (And Design)
MX 2260499	Metawave Turbo
EP 20840369.1	Phased Array Antenna Calibration System And Methods For Use In Millimeter Wave Applications
US 63/523252	Self-Calibration Method Of The Phase Shifter For Phased-Array Radar Applications
US 97/462235	Polaris

WPA