

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7704771

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
MONROE CAPITAL MANAGEMENT ADVISORS, LLC	12/16/2022

RECEIVING PARTY DATA

Name:	REDZONE ROBOTICS, INC., A DELAWARE CORPORATION
Street Address:	195 THORN HILL ROAD
Internal Address:	SUITE 110
City:	WARRENDALE
State/Country:	PENNSYLVANIA
Postal Code:	15086

PROPERTY NUMBERS Total: 41

Property Type	Number
Patent Number:	7131791
Patent Number:	7720570
Patent Number:	7993469
Patent Number:	8024066
Patent Number:	8041517
Patent Number:	8060257
Patent Number:	8170715
Patent Number:	8525124
Patent Number:	9156105
Patent Number:	9183527
Patent Number:	9482681
Patent Number:	8467049
Patent Number:	9739792
Patent Number:	9784599
Patent Number:	9927354
Patent Number:	10072800
Patent Number:	10115237
Patent Number:	10220423
Patent Number:	10221987

PATENT

Property Type	Number
Patent Number:	10309949
Patent Number:	10970833
PCT Number:	US1859786
Patent Number:	11125910
PCT Number:	US1859790
Patent Number:	10937144
PCT Number:	US1859795
Patent Number:	11192262
Application Number:	16145333
Patent Number:	10649450
PCT Number:	US1915933
Patent Number:	11029257
PCT Number:	US1922183
Patent Number:	10783680
Patent Number:	10859554
Application Number:	62583683
Application Number:	62583689
Application Number:	62583694
Application Number:	62565180
Application Number:	62565167
Application Number:	62624838
Application Number:	62643482

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	85377.454813
NAME OF SUBMITTER:	PAUL D. BANGOR, JR.
SIGNATURE:	/Paul D. Bangor, Jr./
DATE SIGNED:	12/20/2022

Total Attachments: 8
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RELEASE OF SECURITY INTERESTS IN PATENTS

THIS RELEASE OF SECURITY INTERESTS IN PATENTS (“Release”) is made as of this 16th day of December, 2022, by **MONROE CAPITAL MANAGEMENT ADVISORS, LLC**, as administrative agent (“Administrative Agent”), in favor of **REDZONE ROBOTICS, INC.**, a Delaware corporation (“Grantor”). Capitalized terms used but not defined herein shall have the same meanings assigned to such terms in the Patent Security Agreement (as defined below).

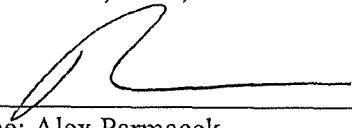
FOR GOOD AND VALUABLE CONSIDERATION, the receipt and adequacy of which are hereby acknowledged, Administrative Agent hereby terminates the Existing Patent Security Agreement (as defined below) and automatically releases, terminates and discharges any and all liens and security interests granted by the Grantor in favor of Administrative Agent in the patent and patent applications, including those listed on Schedule 1 attached hereto pursuant to that certain Patent Security Agreement, dated as of June 4, 2018 (the “Patent Security Agreement”), executed by the Grantor in favor of Administrative Agent and recorded with the United States Patent and Trademark Office (“USPTO”) on June 4, 2018 at Reel Frame 45982/0558 (Patent Division), and recorded with the Canadian Intellectual Property Office (“CIPO”) on June 20, 2018 at registration number 05752326, as supplemented by that certain Patent Security Agreement, dated as of February 22, 2019 (the “First Supplemental Patent Security Agreement”), executed by the Grantor in favor of Administrative Agent and recorded with the USPTO on February 25, 2019 at Reel Frame 48428/0963 (Patent Division), as supplemented by that certain Patent Security Agreement, dated as of September 13, 2019 (the “Second Supplemental Patent Security Agreement”), executed by the Grantor in favor of Administrative Agent and recorded with the USPTO on September 17, 2019 at Reel/Frame 50407/0158 (Patent Division), as supplemented by that certain Patent Security Agreement, dated as of March 4, 2020 (the “Third Supplemental Patent Security Agreement” and together with the Patent Security Agreement, the First Supplemental Patent Security Agreement and the Second Supplemental Patent Security Agreement, the “Existing Patent Security Agreement”), executed by Grantor in favor of Administrative Agent, and any right, title or interest of the Administrative Agent in or to such patents and patent applications, and all products and proceeds thereof, shall hereby immediately cease and become void.

The Administrative Agent authorizes and acknowledges that this document may be filed with the USPTO, the CIPO as well as the intellectual property offices of any other jurisdictions to evidence the termination and release granted herein.

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IN WITNESS WHEREOF, Administrative Agent has caused this Release to be executed by its authorized officer as of the date of this Release.

**MONROE CAPITAL MANAGEMENT
ADVISORS, LLC**, as Administrative Agent

By: 
Name: Alex Parmacek
Title: Director

SCHEDULE 1

PATENT AND PATENT APPLICATIONS

Patents Relating to the Existing Patent Security Agreement

US Issued

Patent No.	Title	Status	Docket No.	Owner
7,131,791	PIPELINE REHABILITATION SYSTEMS	Granted.	RedZone_008	RedZone Robotics, Inc.
7,720,570	NETWORK ARCHITECTURE FOR REMOTE ROBOT WITH INTERCHANGEABLE TOOLS	Granted.	RedZone_019	RedZone Robotics, Inc.
7,993,469	SENSOR BASED MICRO-CLEANING OF BURIED INFRASTRUCTURE	Granted.	RedZone_020	RedZone Robotics, Inc.
8,024,066	AUTONOMOUS INSPECTOR MOBILE PLATFORM	Granted.	RedZone_021	RedZone Robotics, Inc.
8,041,517	SPATIO-TEMPORAL AND CONTEXT-BASED INDEXING AND REPRESENTATION OF SUBTERRANEAN NETWORKS AND MEANS FOR DOING THE SAME	Granted.	RedZone_022	RedZone Robotics, Inc.
8,060,257	NETWORK ARCHITECTURE FOR REMOTE ROBOT WITH INTERCHANGEABLE TOOLS	Granted.	RedZone_007	RedZone Robotics, Inc.
8,170,715	METHODS AND DEVICES FOR AUTOMATED WORK IN PIPES BASED ON IMPEDANCE CONTROL	Granted.	RedZone_023	RedZone Robotics, Inc.

Patent No.	Title	Status	Docket No.	Owner
8,525,124	DEVICE FOR PIPE INSPECTION AND METHOD OF USING SAME	Granted.	RedZone_024	RedZone Robotics, Inc.
9,156,105	MANAGING INFRASTRUCTURE DATA	Granted.	RedZone_025	RedZone Robotics, Inc.
9,183,527	ANALYZING INFRASTRUCTURE DATA	Granted.	RedZone_026	RedZone Robotics, Inc.; Tyler Foreman
9,482,681	DEVICE FOR PIPE INSPECTION AND METHOD OF USING SAME	Granted.	RedZone_006	RedZone Robotics, Inc.
8,467,049	MANHOLE MODELER USING A PLURALITY OF SCANNERS TO MONITOR THE CONDUIT WALLS AND EXTERIOR	Granted.	RedZone_027	RedZone Robotics, Inc.
9,739,792	DEVICE FOR PIPE INSPECTION AND METHOD OF USING SAME	Granted.	RedZone_005	RedZone Robotics, Inc.
9,784,599	MODULAR INFRASTRUCTURE ASSET INSPECTION ROBOT	Granted.	RedZone_013	RedZone Robotics, Inc.
9,927,354	METHOD AND APPARATUS FOR PIPE IMAGING WITH CHEMICAL ANALYSIS	Granted.	RedZone_016	RedZone Robotics, Inc.
10,072,800	GRAPHICALLY REPRESENTING A CONDITION OF INFRASTRUCTURE	Granted.	RedZone_014	RedZone Robotics, Inc.
10,115,237	VIRTUAL REALITY DISPLAY OF PIPE INSPECTION DATA	Granted.	RedZone_018	RedZone Robotics, Inc.

Patent No.	Title	Status	Docket No.	Owner
10,220,423	MOBILE JETTER AND PIPE INSPECTION ROBOT	Granted.	RedZone_015	RedZone Robotics, Inc.
10,221,987	MANAGING INFRASTRUCTURE DATA	Granted.	RedZone_012	RedZone Robotics, Inc.
10,309,949	METHOD AND APPARATUS FOR ROBOTIC, IN-PIPE WATER QUALITY TESTING	Granted.	RedZone_017	RedZone Robotics, Inc.

US Patent Applications

Title	Application No.	Docket No.	Filing date	Status
PIPE IMAGE FEATURE ANALYSIS USING CALIBRATION DATA	16/184,026	RedZone_009	11/8/2018	Issued as 10970833
PIPE IMAGE FEATURE ANALYSIS USING CALIBRATION DATA	PCT/US18/59786	RedZone_009_PCT	11/08/2018	Expired
UNDERGROUND INFRASTRUCTURE SENSING USING UNMANNED AERIAL VEHICLE (UAV)	16/184,054	RedZone_010	11/8/2018	Issued as 11125910
UNDERGROUND INFRASTRUCTURE SENSING USING UNMANNED AERIAL VEHICLE (UAV)	PCT/US18/59790	RedZone_010_PCT	11/08/2018	Expired
PIPE FEATURE IDENTIFICATION USING PIPE INSPECTION DATA ANALYSIS	16/184,073	RedZone_011	11/8/2018	Issued as 10937144

PIPE FEATURE IDENTIFICATION USING PIPE INSPECTION DATA ANALYSIS	PCT/US18/59795	RedZone_011_PCT	11/08/2018	Expired
CONTROLLING ROBOT WITH HEAD MOUNTED CONTROLLER	16/145,362	RedZone_029	9/28/2018	Issued as 11192262
MULTIPLE CAMERA IMAGER FOR INSPECTION OF LARGE DIAMETER PIPES, CHAMBERS OR TUNNELS	16/145,333	RedZone_028	9/28/2018	Pending
AUGMENTED REALITY (AR) DISPLAY OF PIPE INSPECTION DATA	16/263,052	RedZone_030	1/31/2019	Issued as 10649450
AUGMENTED REALITY (AR) DISPLAY OF PIPE INSPECTION DATA	PCT/US19/15933	RedZone_033_PCT	1/31/2019	Expired
IMAGE PROCESSING TECHNIQUES FOR MULTI-SENSOR INSPECTION OF PIPE INTERIORS	16/353,034	RedZone_031	3/14/2019	Issued as 11029257
IMAGE PROCESSING TECHNIQUES FOR MULTI-SENSOR INSPECTION OF PIPE INTERIORS	PCT/US19/22183	RedZone_031_PCT	3/14/2019	Expired
SERVER-BASED MANAGEMENT OF ROBOTIC PIPE INSPECTION DATA AND ANALYSIS REPORTS	16/249,424	RedZone_012_C1	01/16/2019	Issued as 10783680

METHOD AND APPARATUS FOR ROBOTIC, IN-PIPE WATER QUALITY TESTING	16/429,655	RedZone_017_C1	06/3/2019	Issued as 10859554
DEFECT ANALYSIS USING CALIBRATED IMAGE	62/583,683		11/9/2017	Expired
Underground infrastructure sensing unmanned aerial vehicle	62/583,689		11/9/2017	Expired
Pipe feature identification using pipe inspection data analysis	62/583,694		11/9/2017	Expired
CONTROLLING ROBOT WITH HEAD MOUNTED CONTROLLER	62/565,180		9/29/2017	Expired
MULTIPLE CAMERA IMAGER FOR INSPECTION OF LARGE DIAMETER PIPES, CHAMBERS OR TUNNELS	62/565,167		9/29/2017	Expired
AUGMENTED REALITY (AR) DISPLAY OF PIPE INSPECTION DATA	62/624838		2/1/2018	Expired
Image Processing Techniques for Multi-Sensor Inspection of Pipe Interiors	62/643,482		3/15/2018	Expired

Foreign Patents

Foreign Patents		Country	Status	Publication No.
EP2352981	Device for pipe inspection and method of using same	Europe – validated in Belgium, Germany, Spain, France, Great Britain, Ireland, Italy, Monaco, Portugal, Turkey	Lapsed	EP2352981B1
CA2595453	Autonomous inspector mobile platform	Canada	In Force	CA2595453C

Foreign Pending Patent Applications

Title	Application No.	CFWWS Docket No.	Filing date	Status	Owner
DEVICES, PRODUCTS AND METHODS FOR PIPE IMAGING AND INSPECTION	EP17857324	RedZone_015-18_EP	4/19/2019	Pending	RedZone Robotics, Inc.
DEVICES, PRODUCTS AND METHODS FOR PIPE IMAGING AND INSPECTION	HKN.62020001908.6	RedZone_015-18_HK	1/22/2020	Pending	RedZone Robotics, Inc.