

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7659504

SUBMISSION TYPE:	RESUBMISSION
NATURE OF CONVEYANCE:	ASSIGNMENT
RESUBMIT DOCUMENT ID:	507447820
CONVEYING PARTY DATA	
Name	Execution Date
RAM PHOTONICS SP, INC.	07/25/2022
RECEIVING PARTY DATA	
Name:	RAYTHEON COMPANY
Street Address:	870 WINTER STREET
City:	WALTHAM
State/Country:	MASSACHUSETTS
Postal Code:	02451-1449
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	10788520
CORRESPONDENCE DATA	
Fax Number:	(972)628-3616
<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:	972-628-3600
Email:	patents@munckwilson.com
Correspondent Name:	DOCKET CLERK-RAYTHEON/MWM
Address Line 1:	P.O.DRAWER 800889
Address Line 4:	DALAS, TEXAS 75380
ATTORNEY DOCKET NUMBER:	RAYN01-172873-US2
NAME OF SUBMITTER:	DAVID M. DOYLE
SIGNATURE:	/David M. Doyle, Reg. No. 43,596/
DATE SIGNED:	11/22/2022
Total Attachments: 8	
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PATENT

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PATENT AND PATENT LICENSE ASSIGNMENT

This **PATENT ASSIGNMENT** (this “*Agreement*”) is made and entered into effective as of July 25, 2022, by and among RAM Photonics LLC, a California limited liability company (“*RAM Photonics*”), RAM Photonics SP, Inc., a New York corporation (“*RAM SP*”, together with RAM Photonics, each, an “*Assignor*” and, collectively the “*Assignors*”), and Raytheon Company, a Delaware corporation (the “*Assignee*”). For purposes of this Agreement, each Assignee and Assignor shall constitute a “Party” and, collectively, shall constitute the “Parties.”

WHEREAS, Assignors and Assignee are parties to an Asset Purchase Agreement, dated as of June 29, 2022 (the “*Purchase Agreement*”), wherein among other things, Assignee purchased from Assignors certain product lines and the Patents identified on Schedule A (collectively referred to herein as the “*Acquired Patents*”) and certain patent license agreements, including the license agreement identified on Schedule B (“*Assigned License*”). Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Purchase Agreement.

NOW, THEREFORE, in consideration of the foregoing, and the mutual agreements, provisions and covenants contained herein and in the Purchase Agreement, and subject to and in accordance with the Purchase Agreement, the Parties hereby agree as follows:

1. Assignment. Each Assignor hereby assigns, conveys and transfers to Assignee, its successors and assigns all of such Assignor’s right, title, goodwill, and interest in, to the following:

(a) all intellectual property including, without limitation, any innovation, information, invention, formula, discovery, product, process, work, or design disclosed, embodied, shown, or claimed in the Acquired Patents, implicitly or explicitly;

(b) the Acquired Patents, the right to claim priority to the Acquired Patents, all applications based in whole or in part upon the Acquired Patents, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the Acquired Patents;

(c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this Section or that disclose or claim intellectual property described in (a) of this Section, in whole or in part;

(d) all claims for damages by reason of past infringement of any rights under the intellectual property described in (a), (b) or (c) of this Section (including provisional

rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use; and

(e) the Assigned License.

2. Purpose for Recordation. This Agreement has been executed and delivered by Assignors to Assignee for the purpose of recording this Agreement with the United States Patent and Trademark Office (the "*PTO*") or other U.S. or foreign governing authority, and the Parties hereby authorize the PTO or other such U.S. or foreign governing authority to record this Agreement.

3. Purchase Agreement. This Agreement is delivered in accordance with and is subject to all of the representations, warranties, covenants, exclusions and indemnities (including all caps, baskets and limits related thereto) set forth in the Purchase Agreement, all of which are hereby incorporated herein by reference.

4. Further Assurances. From time to time after the Closing, without additional consideration, each Assignor hereto will (or, if appropriate, cause their Affiliates to) execute and deliver such further instruments and take such other action as is necessary to effectuate the assignment and transfer of the Acquired Patents. Assignors hereby appoint Assignee as Assignors' attorney-in-fact, with full authority in the place and stead of Assignors, and in the name of Assignors, solely to execute and deliver any such instruments in the event that Assignors are unable or unwilling to execute and deliver such within five (5) days after Assignee's written request.

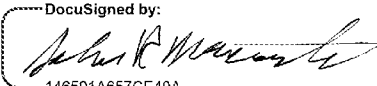
5. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

[Signature Page Follows]

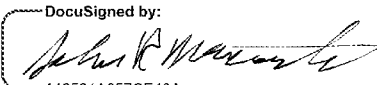
IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

ASSIGNORS:

RAM PHOTONICS LLC

DocuSigned by:

By: _____
146591A657CE40A...
Name: John Marciante
Title: President

RAM PHOTONICS SP, INC.

DocuSigned by:

By: _____
146591A657CE40A...
Name: John Marciante
Title: President

ASSIGNEE:

RAYTHEON COMPANY

By: 

Name: Bradley Doyle

Title: Assistant Secretary

[Signature Page to Patent Assignment]

SCHEDULE A

Acquired Patents

US Patents and Applications		Filing Date or Issue Date	Record Owner	Status	Title
1	U.S. Pat. No. 8,044,655	Issued Date: Oct. 25, 2011	RAM Photonics LLC	Issued	Pulse measurement apparatus and method
2	U.S. Pat. No. 8,981,273	Issued Date: Mar. 17, 2015	RAM Photonics LLC	Issued	Optical frequency tracking and stabilization based on extra-cavity frequency
3	U.S. Pat. No. 9,528,875	Issued Date: Dec. 27, 2016	RAM Photonics LLC	Issued	Optical frequency tracking and stabilization based on extra-cavity frequency
4	U.S. Pat. No. 10,756,776	Issued Date: Aug. 25, 2020	RAM Photonics LLC	Issued	Method and system for spread spectrum code acquisition
5	U.S. Pat. No. 10,788,520	Issued Date: Sep. 29, 2020	RAM Photonics SP, Inc.	Issued	Sub-noise detection of a fast random event
6	U.S. Pat. No. 11,005,520	Issued Date: May 11, 2021	RAM Photonics LLC	Issued	Method and system for spread spectrum code acquisition
7	U.S. Pat. No. 11,137,627	Issued Date: Oct. 05, 2011	RAM Photonics LLC	Issued	Methods for computation-free wideband spectral correlation and analysis
8	U.S. Appl. No. 17/232,358	Filing Date: Apr. 16, 2021	RAM Photonics LLC	Pending	Method and system for spread spectrum code acquisition
9	U.S. Appl. No. 17/825,902	Filing Date: May 26, 2022	RAM Photonics LLC	Pending	Wireless mapping in real-time using correlative passive receiver
10	U.S. Appl. No. 17/825,899	Filing Date: May 26, 2022	RAM Photonics LLC	Pending	Wireless mapping in real-time for autonomous vehicles using correlative passive receiver
11	U.S. Appl. No.	Filing Date:	RAM Photonics LLC	Pending	Methods for Computation-Free

US Patents and Applications		Filing Date or Issue Date	Record Owner	Status	Title
	17/467,887	Sep. 07, 2021			Wideband Spectral Correlation and Analysis
12	U.S. Pat. No. 11,095,395	Issued Date: Aug. 17, 2021	RAM Photonics LLC	Issued	Increase in reach of unrepeatered fiber transmission
13	U.S. Appl. No. 17/681,623	Filing Date: Feb. 25, 2022	RAM Photonics LLC	Pending	Method and System for Performing Signal Analysis Using a Hybrid Photonic-Electronic Processor
14	U.S. Prov. Appl. No. 63/284,562	Filing Date: Nov. 30, 2021	RAM Photonics LLC	Pending	Methods and Systems for Integration of Thin Film Nonlinear Optical Materials for Silicon Photonics
15	U.S. Prov. Appl. No. 63/283,951	Filing Date: Nov. 29, 2021	RAM Photonics LLC	Pending	Method and System for Performing Convolutions Using an Optical Network
16	U.S. Appl. No. 17/681,629	Filing Date: Feb. 25, 2022	RAM Photonics LLC	Pending	Method and System for Performing Signal Analysis Using a Correlative Receiver
17	U.S. Appl. No. 17/390,148	Filing Date: Jul. 30, 2021	RAM Photonics LLC	Pending	Increase in reach of unrepeatered fiber transmission

Non-US Patents	Issue Date	Record Owner	Country	Title
U.K Pat. No. 2574933	Aug. 12, 2020	RAM Photonics LLC	UK	Methods for computation-free wideband spectral correlation and analysis
Non-US Patent Applications	Filing Date or Publication Date			
U.K. Appl. No. 1819562.8	Publication Date: Jul. 17, 2019	RAM Photonics LLC	UK	Method and system for spread spectrum code acquisition
German Appl. No 10 2018 130 696.2	Publication Date: Jun. 06, 2019	RAM Photonics LLC	Germany	Method and system for spread spectrum code acquisition
German Appl. No 10 2019 111 306.7	Publication Date: Nov. 07, 2019	RAM Photonics LLC	Germany	Methods for computation-free wideband spectral

				correlation and analysis
French Appl. No. 1904624	Publication Date: Nov. 08, 2019	RAM Photonics LLC	France	Methods for computation-free wideband spectral correlation and analysis
PCT US Appl. No. 2022031118	Filing Date: May 26, 2022	RAM Photonics LLC	PCT	Wireless mapping in real-time using correlative passive receiver

SCHEDULE B

Assigned License

- 1 Exclusive Intellectual Property License Agreement. (VDR 6.18 License Agreement 2), effective date August 8, 2016, between John R. Marciante, Stojan Radic, and Nikola Alic, (“Licensor”) and RAM Photonics LLC (“Licensee” or “RAM LLC”) recorded with the United States Patent and Trademark Office at Reel 050774, Frame 0338 on October 21, 2019, and as assigned to Roshmere, Inc. effective as of October 17, 2016.