PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	GRANT OF SECURITY INTEREST IN PATENT RIGHTS		

CONVEYING PARTY DATA

Name	Execution Date
SEMTECH CORPORATION	01/12/2023
TRIUNE SYSTEMS, L.L.C.	01/12/2023
TRIUNE IP, LLC	01/12/2023

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A.	
Street Address:	10 S DEARBORN ST.	
Internal Address:	FLOOR L2	
City:	CHICAGO	
State/Country:	ILLINOIS	
Postal Code:	60603	

PROPERTY NUMBERS Total: 54

Property Type	Number
Patent Number:	11112917
Patent Number:	11177773
Patent Number:	11245434
Patent Number:	11296687
Patent Number:	11310085
Patent Number:	11347989
Patent Number:	11362083
Patent Number:	11380672
Patent Number:	11456852
Patent Number:	11463088
Patent Number:	11467204
Patent Number:	11469149
Patent Number:	11474648
Patent Number:	11108391
Patent Number:	11139860
Patent Number:	11355967
Patent Number:	11368191

PATENT REEL: 062389 FRAME: 0057

507692819

Property Type	Number
Patent Number:	11309126
Application Number:	17090731
Application Number:	17100993
Application Number:	17137791
Application Number:	17171794
Application Number:	17247073
Application Number:	17364407
Application Number:	17370565
Application Number:	17450474
Application Number:	17533762
Application Number:	17651882
Application Number:	17659127
Application Number:	17662890
Application Number:	17664841
Application Number:	17591208
Application Number:	17645500
Application Number:	17648897
Application Number:	17688300
Application Number:	17817813
Application Number:	17817814
Application Number:	17817816
Application Number:	17818909
Application Number:	17846283
Application Number:	17894814
Application Number:	17894837
Application Number:	17899701
Application Number:	17947010
Application Number:	17956748
Application Number:	63297089
Application Number:	63318434
Application Number:	63335508
Application Number:	63335524
Application Number:	17972203
Application Number:	18078169
Application Number:	17992839
Application Number:	17963084
Application Number:	18079840

CORRESPONDENCE DATA

Fax Number: (212)455-2502

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.

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Correspondent Name: COURTNEY WELSHIMER, ESQ.

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ATTORNEY DOCKET NUMBER:	509265/2423
NAME OF SUBMITTER:	COURTNEY WELSHIMER
SIGNATURE:	/CW/
DATE SIGNED:	01/12/2023

Total Attachments: 7

source=Semtech - Grant of Security Interest in Patents Executed#page1.tif source=Semtech - Grant of Security Interest in Patents Executed#page2.tif source=Semtech - Grant of Security Interest in Patents Executed#page3.tif source=Semtech - Grant of Security Interest in Patents Executed#page4.tif source=Semtech - Grant of Security Interest in Patents Executed#page5.tif source=Semtech - Grant of Security Interest in Patents Executed#page6.tif source=Semtech - Grant of Security Interest in Patents Executed#page7.tif

GRANT OF SECURITY INTEREST IN PATENT RIGHTS

This GRANT OF SECURITY INTEREST IN PATENT RIGHTS (this "Patent Security Agreement"), is dated as of January 12, 2023 and is entered into by SEMTECH CORPORATION, a Delaware Corporation ("Borrower"), TRIUNE SYSTEMS, L.L.C., a Texas limited liability company ("Triune Systems"), and TRIUNE IP, LLC, a Texas limited liability company ("Triune IP" and, together with Borrower and Triune Systems, each an "Assignor" and collectively, the "Assignors"), in favor of JPMORGAN CHASE BANK, N.A., as the Administrative Agent (in such capacity, the "Assignee") under the Credit Agreement (as defined below) for the benefit of the Secured Parties (as defined in the Credit Agreement).

WITNESSETH:

WHEREAS, Borrower, the Guarantors party thereto, certain Lenders party to the Credit Agreement, JPMorgan Chase Bank, N.A., in its separate capacities as successor Administrative Agent for the benefit of the Secured Parties (in such capacity, the "Successor Agent") and as successor Swing Line Lender and as an L/C Issuer, HSBC Bank USA, National Association, in its separate capacities as resigning Administrative Agent, for the benefit of the Secured Parties (in such capacity, the "Resigning Agent"), as resigning Swing Line Lender and as an L/C Issuer, and U.S. Bank National Association, in its capacity as an L/C Issuer, have entered into that Third Amendment and Restatement Agreement, dated as of September 26, 2022 (as the same may from time to time be amended, modified, supplemented or restated, the "Credit Agreement," which Credit Agreement amends and restates in its entirety the Second Amended and Restated Credit Agreement dated as of November 7, 2019, as amended, supplemented or otherwise previously modified), pursuant to which, among other things, (i) the Resigning Agent resigns as, and the Successor Agent is appointed as, the Administrative Agent for the benefit of the Secured Parties and (ii) the Lending Parties agreed to make certain Credit Extension to Borrower on behalf of and for the benefit of Borrower and the Subsidiary Guarantors on the terms and subject to the conditions set forth therein and in the other Loan Documents;

WHEREAS, in order to secure their Obligations to the Administrative Agent and the other Secured Parties under the Credit Agreement and other Loan Documents, Borrower and each of the Guarantors party to the Credit Agreement, including each of the Assignors party to this Patent Security Agreement, have entered into that Second Amended and Restated Security Agreement, dated as of November 7, 2019 (as the same may from time to time be further amended, modified, supplemented or restated, the "Security Agreement"), in favor of Assignee, for the benefit of the Secured Parties, pursuant to which, among other things, each Assignor has granted to Assignee (as successor in interest to the Resigning Agent) a security interest in all of such Assignor's respective right, title and interest, whether now owned or at any time hereafter acquired by such Assignor or in which such Assignor now has or at any time in the future may acquire any right, title or interest, in, to and under all of the Collateral (as defined in the Security Agreement); and

WHEREAS, as a prerequisite to the Lending Parties' obligation to make, extend and maintain the credit to Borrower under the Credit Agreement and the other Loan Documents, Assignee requires that each Assignor enter into this Patent Security Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals and for other good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, each Assignor, jointly and severally, hereby agrees as follows:

1. <u>Definitions</u>. Unless otherwise defined herein or the context otherwise requires, capitalized terms used in this Patent Security Agreement, including its preamble and recitals, shall have

the same meanings when used herein as given to them in the Credit Agreement or the Security Agreement, as applicable.

- Grant of Security Interest. As security for the full, complete and final payment and performance when due (whether at stated maturity, by acceleration or otherwise) of all of the Secured Obligations, whether such Secured Obligations were incurred originally under the Loan Documents or otherwise, each Assignor hereby assigns, conveys, mortgages, pledges, hypothecates and transfers to Assignee, for the benefit of the Secured Parties, and hereby grants to Assignee, for the benefit of the Secured Parties, a security interest in and to all of such Assignor's respective right, title and interest in, to and under each of the following, whether now owned or at any time hereafter acquired by such Assignor or in which such Assignor now has or at any time in the future may acquire any right, title or interest: (i) all patents issued by the PTO, or any other country or any political subdivision of any of the foregoing, or any other registry, including the PCT System of the World Intellectual Property Organization, all recordings thereof, and all applications therefor, including, without limitation, those listed on Schedule A hereto; (ii) all reissues, continuations, continuations-in-part, and extensions thereof; (iii) all income, royalties, damages and payments now and hereafter due or payable to such Assignor under and with respect thereto, including payments under all Patent Licenses entered into in connection therewith and damages and payments for past, present or future infringements thereof; (iv) the right to sue for past, present and future infringements thereof; and (v) all of such Assignor's rights corresponding thereto throughout the world (collectively, the "Patent Collateral"); provided that, in no event shall the Patent Collateral include, and no Assignor shall be deemed to have conveyed, mortgaged, assigned, pledged, hypothecated, transferred or granted a security interest in, any of such Assignor's right, title or interest in any Excluded Collateral.
- 3. <u>Acknowledgement</u>. Each Assignor does hereby further acknowledge and affirm that the rights and remedies of Assignee with respect to the Patent Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.
- 4. <u>Termination</u>. Following the termination of the Security Agreement in accordance with its terms, Assignee agrees to execute such releases as Assignor may reasonably request, at the sole cost and expense of such Grantor, to evidence the satisfaction and termination of the Security Agreement and the release of the security interest granted in this Patent Security Agreement.
- 5. <u>Choice of Law.</u> This Patent Security Agreement and any claim, controversy dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Patent Security Agreement and the transactions contemplated hereby will be governed by, and construed in accordance with, the laws of the State of New York, without regard to principles of conflicts of law other than New York General Obligations Law 5-1401 and 5-1402.
- 6. <u>Counterparts</u>. This Patent Security Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which will constitute an original, but all of which when taken together will constitute a single contract. Signature pages may be detached from multiple counterparts and attached to a single counterpart so that all signature pages are attached to the same document. Delivery of an executed counterpart of a signature page to this Patent Security Agreement by facsimile or electronic transmission (such as "pdf") will be as effective as delivery of a manually executed counterpart of this Patent Security Agreement.

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IN WITNESS WHEREOF, each of the parties hereto have caused this Patent Security Agreement to be duly executed as of the day and year first above written.

ASSIGNORS:

SEMTECH CORPORATION, a Delaware corporation

Name: Emeka N. Chukwu

Title: Executive Vice President, and Chief Financial Officer

TRIUNE SYSTEMS, L.L.C., a Texas limited liability company

Name: Emeka N. Chukwu

Title: President, and Chief Financial Officer

TRIUNE IP, LLC, a Texas limited liability company

Name: Emeka N. Chukwu

Title: President, and Chief Financial Officer

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ASSIGNEE:

JPMORGAN CHASE BANK, N.A.,

as Administrative Agent

By: Cairlin @ Steward

Name: Caitlin Stewart
Title: Executive Direct

Executive Director

REEL: 062389 FRAME: 0063

SCHEDULE A

U.S. PATENTS AND PATENT APPLICATIONS

Title	Patent No.	Application	Owner
M. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	11 112 017	No.	0 1 0
Method and device for improved	11,112,917	16/837,251	Semtech Corporation
accuracy of proximity and touch			
detection in mobile devices	11 177 772	1.6/0.47 100	C + 1 C + i
Transimpedance amplifiers	11,177,773	16/947,190	Semtech Corporation
Low power long-range radio	11,245,434	17/114,619	Semtech Corporation
Feed-forward current	11,296,687	17/000,557	Semtech Corporation
compensation for CMOS signal			
path	11.010.007	15/114560	
LoRa advanced receiver	11,310,085	17/114,568	Semtech Corporation
Transmitting tag	11,347,989	17/026,994	Semtech Corporation
TVS diode circuit with high	11,362,083	16/788,034	Semtech Corporation
energy dissipation and linear			
capacitance			
Method and device for electrical	11,380,672	16/878,863	Semtech Corporation
overstress and electrostatic			
discharge protection			
Transmitter, receiver, and method	11,456,852	17/327,326	Semtech Corporation
for chirp-modulated radio signals			
Proximity sensor with nonlinear	11,463,088	17/006,347	Semtech Corporation
filter and method			
Testing an integrated capacitor	11,467,204	16/949,069	Semtech Corporation
Semiconductor device and method	11,469,149	17/067,277	Semtech Corporation
of forming mold degating structure			
for pre-molded substrate			
Method and Device for Improved	11,474,648	17/091,946	Semtech Corporation
Accuracy of Proximity and Touch	11,474,040	177051,540	Semicen corporation
Detection in Mobile Devices			
Galvanically isolated switch	11,108,391	16/694,301	Triune IP, LLC
system	11,100,571	10/051,501	Thane II, EEC
System			
Resonant circuit dynamic	11,139,860	16/907,642	Triune IP, LLC
optimization system and method			
Method and system of wireless	11,355,967	17/020,032	Triune IP, LLC
power transfer foreign object			
detection			
Multi-use wireless power and data	11,368,191	16/799,239	Triune IP, LLC
system	· 		
Wireless power transmittal	11,309,126	17/107,184	Triune Systems, L.L.C.
Semiconductor Device and	N/A	17/090,731	Semtech Corporation
Method of Forming Insulating			
Layers Around Semiconductor Die			
-			

Title	Patent No.	Application No.	Owner
CAPACITIVE PROXIMITY SENSOR IN A MOBILE DEVICE AND METHOD OF LIMITING RADIATION ABSORPTION	N/A	17/100,993	Semtech Corporation
Side-Solderable Leadless Package	N/A	17/137,791	Semtech Corporation
TIME-AVERAGED PROXIMITY SENSOR	N/A	17/171,794	Semtech Corporation
CHANNEL QUALITY DETERMINATION	N/A	17/247,073	Semtech Corporation
Protection Circuit with a FET Device Coupled from a Protected Bus to Ground	N/A	17/364,407	Semtech Corporation
ANALOG FIR FILTER	N/A	17/370,565	Semtech Corporation
Single-Shot Encapsulation	N/A	17/450,474	Semtech Corporation
DOPPLER RANGING SYSTEM	N/A	17/533,762	Semtech Corporation
Method and Device for Improved Accuracy of Proximity and Touch Detection in Mobile Devices	N/A	17/651,882	Semtech Corporation
Integrated High Voltage Capacitor	N/A	17/659,127	Semtech Corporation
TVS Diode Circuit with High Energy Dissipation and Linear Capacitance	N/A	17/662,890	Semtech Corporation
Semiconductor Device and Method of Stacking Semiconductor Die for System- Level ESD Protection	N/A	17/664,841	Semtech Corporation
Transimpedance Amplifiers	N/A	17/591,208	Semtech Corporation
Semiconductor Device and Method of Forming Substrate with 3-Sided Wettable Flank	N/A	17/645,500	Semtech Corporation
A Transimpedance Amplifier	N/A	17/648,897	Semtech Corporation
Multichannel Capacitive Sensor Device	N/A	17/688,300	Semtech Corporation
Biasing Control for Compound Semiconductors	N/A	17/817,813	Semtech Corporation
Signal Termination for Amplifiers	N/A	17/817,814	Semtech Corporation
Biasing of Travelling Wave Amplifiers	N/A	17/817,816	Semtech Corporation
Optical Receivers	N/A	17/818,909	Semtech Corporation
Wireless Communication Network and Transceiver	N/A	17/846,283	Semtech Corporation
Proximity Sensor for RF Control	N/A	17/894,814	Semtech Corporation

Title	Patent No.	Application No.	Owner
Environmental Sensor	N/A	17/894,837	Semtech Corporation
Proximity Sensor with Nonlinear Filter and Method	N/A	17/899,701	Semtech Corporation
Active Differential Termination Circuit to Compensate for Impedance Mismatch	N/A	17/947,010	Semtech Corporation
Distributed Output Stages with T-Coils	N/A	17/956,748	Semtech Corporation
Proximity Sensor for Portable Wireless Device	N/A	63/297,089	Semtech Corporation
Spread Spectrum Receiver and Testing Method	N/A	63/318,434	Semtech Corporation
Capacitive Sensor Device with Drift Compensation	N/A	63/335,508	Semtech Corporation
Drift Suppression Method, Proximity Sensor and Wireless Device	N/A	63/335,524	Semtech Corporation
Global Navigation Satellite System Receiver	N/A	17/972,203	Semtech Corporation
Proximity Sensor for Portable Wireless Device	N/A	18/078,169	Semtech Corporation
Systems and Methods for Signal Conditioning and Negotiation	N/A	17/992839	Semtech Corporation
Variable Resistor with T-Coil Integrated Switches for Parasitic Mitigation	N/A	17/963,084	Semtech Corporation
Variable Transimpedance Amplifier for Low Power, High Dynamic range, High Data Rate Linear Applications	N/A	18/079,840	Semtech Corporation

RECORDED: 01/12/2023