PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4981939

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
MORGAN STANLEY SENIOR FUNDING, INC.	05/29/2018

RECEIVING PARTY DATA

Name:	MICROSEMI CORP HIGH PERFORMANCE TIMING
Street Address:	ONE ENTERPRISE
City:	ALISO VIEJO
State/Country:	CALIFORNIA
Postal Code:	92656

PROPERTY NUMBERS Total: 14

Property Type	Number
Patent Number:	8022595
Patent Number:	7855564
Patent Number:	6825715
Patent Number:	7800285
Patent Number:	5917272
Patent Number:	6825734
Patent Number:	7569971
Patent Number:	6784756
Patent Number:	7919909
Patent Number:	8073640
Patent Number:	6731180
Application Number:	14933681
Application Number:	14949221
Application Number:	62520818

CORRESPONDENCE DATA

Fax Number: (650)838-5109

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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PATENT 504935193

REEL: 045926 FRAME: 0481

Correspondent Name: BENJAMIN PETERSEN

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Address Line 2: SHEARMAN & STERLING LLP

Address Line 4: MENLO PARK, CALIFORNIA 94025

ATTORNEY DOCKET NUMBER: 35613/102

NAME OF SUBMITTER: BENJAMIN PETERSEN

SIGNATURE: /BENJAMIN PETERSEN/

DATE SIGNED: 05/29/2018

Total Attachments: 4

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PATENT REEL: 045926 FRAME: 0482

PATENT SECURITY AGREEMENT RELEASE

THIS PATENT SECURITY AGREEMENT RELEASE (this "*Release*") is made effective as of May 29, 2018, by Morgan Stanley Senior Funding, Inc. ("*Morgan Stanley*"), as collateral agent (in such capacity, the "*Collateral Agent*") for the Secured Parties (as defined in the Guarantee and Collateral Agreement referred to below), in favor of Microsemi Corp. – High Performance Timing (the "*Grantor*").

WHEREAS, the Grantor was party to that certain Guarantee and Collateral Agreement dated as of January 15, 2016 (the "Guarantee and Collateral Agreement") in favor of the Collateral Agent and Morgan Stanley, as administrative agent (capitalized terms used but not otherwise defined herein shall have the meanings given to them in the Guarantee and Collateral Agreement);

WHEREAS, pursuant to the terms of the Guarantee and Collateral Agreement, the Grantor entered into that certain Patent Security Agreement, dated as of January 24, 218 (the "Patent Security Agreement"); and

WHEREAS, in accordance with the provisions of the Guarantee and Collateral Agreement and the Patent Security Agreement, the Collateral Agent now desires to release its security interest in and to the Collateral (as defined below).

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Collateral Agent hereby agrees as follows:

SECTION 1. Release of Grant of Security. The Collateral Agent hereby releases to the Grantor its security interest in all of the Grantor's right, title and interest in and to the following (the "Collateral"):

- (i) all Patents of such Grantor, including, without limitation, the registered and applied-for Patents of such Grantor listed on Schedule 1 attached hereto; and
- (ii) to the extent not covered by clause (ii), all Proceeds of any of the foregoing.

If and to the extent that the Collateral Agent has acquired any right, title or interest in and to the Collateral under the Patent Security Agreement, the Collateral Agent, without representation or warranty of any kind, hereby re-transfers, re-conveys and re-assigns such right, title or interest to the Grantor.

SECTION 2. <u>Recordation</u>. The Collateral Agent authorizes and requests that the Commissioner for Patents and any other applicable government officer record this Release.

SECTION 3. <u>Governing Law</u>. This Release shall be governed by, and construed in accordance with, the laws of the State of New York.

[Signature Page Follows]

PATENT REEL: 045926 FRAME: 0483 IN WITNESS WHEREOF, the Collateral Agent has caused this Release to be executed by its duly authorized officer.

MORGAN STANLEY SENIOR FUNDING, INC., as Collateral Agent

Name: Lisa Hanson

Title: Authorized Signatory

Schedule 1

PATENTS

Patents Granted

Title	App. Number	Filing Date	Pat. Number	Issue Date	Country	Owner
ASYMMETRIC COMPOSITE ACOUSTIC WAVE	12/202,431	8002/2/9	8,022,595	9/20/2011	US	Microsemi Corp. – High
SENSOR						Performance Timing.
ACOUSTIC WAVE DEVICE PHYSICAL	12/031,055	2/14/2008	7,855,564	12/21/2010	US	Microsemi Corp. – High
PARAMETER SENSOR						Performance Timing.
TEMPERATURE COMPENSATED, HIGH	10/429,151	5/2/2003	6,825,715	11/30/2004	US	Microsemi Corp. – High
EFFICIENCY DIODE DETECTOR						Performance Timing.
COATING FOR HARSH ENVIRONMENTS AND	11/814,167	7/17/2007	7,800,285	9/21/2010	US	Microsemi Corp. – High
SENSORS USING SAME						Performance Timing.
OVEN-HEATED CRYSTAL RESONATOR AND	09/096,026	6/11/1998	5,917,272	6/29/1999	US	Microsemi Corp. – High
OSCILLATOR ASSEMBLY						Performance Timing.
OSCILLATOR MODULE INCORPORATING	10/706,895	11/13/2003	6,825,734	11/30/2004	US	Microsemi Corp. – High
SPIRAL LOOPED-STUB RESONATOR						Performance Timing.
COMPENSATION OF RESONATORS FOR	11/865,829	10/2/2007	7,569,971	8/4/2009	US	Microsemi Corp. – High
SUBSTRATE AND TRANSDUCER ASYMMETRY						Performance Timing.
ON BOARD PROCESSOR COMPENSATED OVEN	10/376,166	2/28/2002	6,784,756	8/31/2004	US	Microsemi Corp. – High
CONTROLLED CRYSTAL OSCILLATOR						Performance Timing.
INTEGRATED COUPLING STRUCTURES	12/429,300	4/24/2009	7,919,909	4/5/2011	US	Microsemi Corp. – High
						Performance Timing.
CONTROLLED COMPRESSION WAVE	12/884,931	9/17/2010	8,073,640	12/6/2011	US	Microsemi Corp. – High
COMPONENTS OF THICKNESS SHEAR MODE						Performance Timing.
MULTIMEASURE AND SENSORS						
EVACUATED MINIATURE SAW OSCILLATOR	10/056,958	10/22/2001	6,731,180	5/4/2004	US	Microsemi Corp. – High
						Performance Timing.

PATENT REEL: 045926 FRAME: 0485

Patents Pending

Title	App. Number	Filing Date Country Owner	Country	Owner
PLANAR INVERTED-F WING ANTENNA FOR WIRELESS CULINARY	14/933,681	11/5/2015 US	SU	Microsemi Corp. – High
APPLIANCES				Performance Timing.
WIRELESS CULINARY PROBE CALIBRATION METHOD AND SYSTEM	14/949,221	11/23/2015 US	US	Microsemi Corp. – High
				Performance Timing.
DOUBLY ROTATED RECTANGULAR CRYSTAL	62/520,818	6/16/2017 US	US	Microsemi Corp. – High
				Performance Timing.

PATENT REEL: 045926 FRAME: 0486

RECORDED: 05/29/2018