

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT6818759

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT (TERM LOAN)
SEQUENCE:	1

CONVEYING PARTY DATA

Name	Execution Date
ELECTRO SCIENTIFIC INDUSTRIES, INC.	07/15/2021
MKS INSTRUMENTS, INC.	07/15/2021

RECEIVING PARTY DATA

Name:	BARCLAYS BANK PLC, AS COLLATERAL AGENT
Street Address:	745 SEVENTH AVENUE
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10019

PROPERTY NUMBERS Total: 10

Property Type	Number
Application Number:	63194472
Application Number:	17322549
Application Number:	17232950
Application Number:	17342341
Application Number:	17237913
Application Number:	17290198
Application Number:	63213075
Application Number:	63178108
Application Number:	17326664
Application Number:	17354680

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 12123186532

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Correspondent Name: ALANA GRAMER

Address Line 1: 200 PARK AVENUE

Address Line 2: PAUL HASTINGS LLP

PATENT

Address Line 4: NEW YORK, NEW YORK 10166	
NAME OF SUBMITTER:	ALANA M GRAMER
SIGNATURE:	/s/ Alana Gramer
DATE SIGNED:	07/17/2021
Total Attachments: 5 source=MKS Instruments - TL Patent Security Agreement (July 2021) [Fully Executed]#page1.tif source=MKS Instruments - TL Patent Security Agreement (July 2021) [Fully Executed]#page2.tif source=MKS Instruments - TL Patent Security Agreement (July 2021) [Fully Executed]#page3.tif source=MKS Instruments - TL Patent Security Agreement (July 2021) [Fully Executed]#page4.tif source=MKS Instruments - TL Patent Security Agreement (July 2021) [Fully Executed]#page5.tif	

PATENT SECURITY AGREEMENT

Patent Security Agreement, dated as of July 15, 2021 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Patent Security Agreement"), by ELECTRO SCIENTIFIC INDUSTRIES, INC. ("ESI") and MKS INSTRUMENTS, INC. ("MKS"), and together with Newport, each a "Grantor"), in favor of BARCLAYS BANK PLC, in its capacity as collateral agent pursuant to the Credit Agreement (in such capacity, the "Collateral Agent").

WITNESSETH:

WHEREAS, (i) ESI is party to that certain Security Agreement Supplement (the "Supplement") dated as of February 1, 2019 by and among ESI, the other Grantors (as defined therein) party thereto and the Collateral Agent and (ii) the Grantors are party to that certain Security Agreement dated as of April 29, 2016 (as modified by the Supplement and as further amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), by and among MKS, the other Grantors (as defined therein) party thereto and the Collateral Agent, in favor of the Collateral Agent, pursuant to which the Grantors are required to execute and deliver to the Collateral Agent this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Credit Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and with the intent to be legally bound hereby, the Grantors hereby agree with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Credit Agreement or the Security Agreement and used herein have the respective meanings assigned thereto in the Credit Agreement or the Security Agreement, in each case, as applicable.

SECTION 2. Grant of Security Interest in Patent Collateral. As security for the payment or performance, as the case may be, in full of the Secured Obligations, including the Guarantees, each Grantor hereby pledges to the Collateral Agent, its successors and assigns, for the benefit of the Secured Parties, and hereby grants to the Collateral Agent, its successors and assigns, for the benefit of the Secured Parties, a security interest in, all right, title or interest in or to any and all of the following assets and properties now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest:

- (a) all Patents of the Grantors listed on Schedule I attached hereto; and
- (b) all products and Proceeds of any of the foregoing (together with clause (a), collectively, the "Patents").

SECTION 3. The Security Agreement. The security interests granted pursuant to this Patent Security Agreement are granted in conjunction with the security interests granted to the Collateral Agent pursuant to the Security Agreement, and the Grantors hereby acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interests in the Patents made and granted hereby are more fully set forth in the Security Agreement. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Termination. Upon the termination of the Security Agreement in accordance with, or as otherwise required pursuant to, Section 6.11 thereof, the Collateral Agent shall, at

the expense of the Grantors, execute, acknowledge, and deliver to the Grantors an instrument in writing in recordable form releasing the liens on and security interests in the applicable Patents under this Patent Security Agreement and any other documents required to evidence the termination of the Collateral Agent's interests in the applicable Patents.

SECTION 5. GOVERNING LAW; JURISDICTION; VENUE; WAIVER OF JURY TRIAL; CONSENT TO SERVICE OF PROCESS.

(A) THE TERMS OF SECTION 10.13 OF THE CREDIT AGREEMENT WITH RESPECT TO GOVERNING LAW, SUBMISSION OF JURISDICTION, VENUE AND WAIVER OF JURY TRIAL ARE INCORPORATED HEREIN BY REFERENCE, *MUTATIS MUTANDIS*, AND THE PARTIES HERETO AGREE TO SUCH TERMS.

(B) EACH PARTY TO THIS PATENT SECURITY AGREEMENT IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 6.01 OF THE SECURITY AGREEMENT. NOTHING IN THIS PATENT SECURITY AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY TO THIS PATENT SECURITY AGREEMENT TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.


SECTION 6. Waivers; Amendments; Modifications. Neither this Patent Security Agreement nor any provision hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Collateral Agent and the Grantor or Grantors with respect to which such waiver, amendment or modification is to apply, subject to any consent required in accordance with Section 10.01 of the Credit Agreement and subject to Section 6.02 of the Security Agreement.

SECTION 7. Notices; Communications. All communications and notices under this Patent Security Agreement shall be in writing and given as provided in Section 6.01 of the Security Agreement.

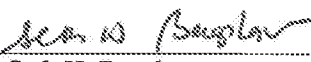
SECTION 8. Counterparts; Effectiveness. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering to the other party hereto one or more counterparts. Delivery by facsimile or other electronic communication of an executed counterpart (including portable document format (PDF)) of a signature page to this Patent Security Agreement shall be effective as delivery of an original executed counterpart of this Patent Security Agreement. This Patent Security Agreement shall become effective as to the Grantors when a counterpart hereof executed on behalf of the Grantors shall have been delivered to the Collateral Agent and a counterpart hereof shall have been executed on behalf of the Collateral Agent, and thereafter shall be binding upon the Grantors and the Collateral Agent and their respective permitted successors and assigns, and shall inure to the benefit of the Grantors, the Collateral Agent and the other Secured Parties and their respective permitted successors and assigns, except that the Grantors shall not have the right to assign or transfer their rights or obligations hereunder or any interest herein or in the Collateral (and any such assignment or transfer shall be void) except as expressly contemplated by the Security Agreement or the Credit Agreement.

[Signature Pages Follow]

MKS INSTRUMENTS, INC.,
as a Grantor

By: 
Name: Seth H. Bagshaw
Title: Senior Vice President, Chief Financial
Officer and Treasurer

ELECTRO SCIENTIFIC INDUSTRIES, INC.
as a Grantor

By: 
Name: Seth H. Bagshaw
Title: President and Treasurer

BARCLAYS BANK PLC,
as the Collateral Agent

DocuSigned by:

Robert Walsh

By: _____
FCDAF84F50AA411...

Name: Robert Walsh

Title: Assistant Vice President

Schedule I
to
PATENT SECURITY AGREEMENT
UNITED STATES PATENTS AND PATENT APPLICATIONS

Ref.	Case	Owner	Title	Status	Appl. No.	Filed	Patent No.	Issued
0233-800BER-21P		MKS Instruments, Inc.	Light-Enhanced Ozone Wafer Processing System and Method of Use	Pending	63/194,472	6/3/2021		
3197-000126-US-DVB		MKS Instruments, Inc.	COOLING AND COMPRESSION CLAMP FOR SHORT LEAD POWER DEVICES	Pending	17/322,549	5/15/2021		
3197-000129-US-DVB		MKS Instruments, Inc.	ADAPTIVE CONTROL FOR A POWER GENERATOR	Pending	17/232,950	4/16/2021		
5089.3102-000		MKS Instruments, Inc.	Methods and Apparatus for Pressure Based Mass Flow Ratio Control Using Differential Pressure Sensors	Pending	17/342,341	6/8/2021		
ASX-187-US-C1		MKS Instruments, Inc.	Dielectric Torus for Improved Plasma Resistance	Pending	17/237,913	4/22/2021		
E268-US1		Electro Scientific Industries, Inc.	PHASED-ARRAY BEAM STEERING FOR MATERIALS PROCESSING	Pending	17/290,198	4/29/2021		
E295-P1		Electro Scientific Industries, Inc.	PROFILING, CHARACTERIZATION, AND CALIBRATION OF AOD "CHIRPED" BEAMS WITH BEAM-CHARACTERIZATION-TOOL	Pending	63/213,075	6/21/2021		
E300-P1		Electro Scientific Industries, Inc.	ROLLER CONTACT WITH REDUCED CONTACT RESISTANCE VARIATION	Pending	63/178,108	4/22/2021		
E181-US3		Electro Scientific Industries, Inc.	PHASED ARRAY STEERING FOR LASER BEAM POSITIONING SYSTEMS	Pending	17/326,664	5/21/2021		
E248-US2		Electro Scientific Industries, Inc.	LASER PROCESSING APPARATUS, METHODS OF LASER-PROCESSING WORKPIECES AND RELATED ARRANGEMENTS	Pending	17/354,680	6/22/2021		