

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM382765

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
SEQUENCE:	1

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
MKS Instruments, Inc.		04/29/2016	Corporation: MASSACHUSETTS
Newport Corporation		04/29/2016	Corporation: NEVADA

RECEIVING PARTY DATA

Name:	Barclays Bank PLC
Street Address:	745 7th Avenue
City:	New York
State/Country:	NEW YORK
Postal Code:	10019
Entity Type:	Private Limited Company: GREAT BRITAIN

PROPERTY NUMBERS Total: 105

Property Type	Number	Word Mark
Registration Number:	3341575	AIRGARD
Registration Number:	1524257	ASTEX
Registration Number:	2237573	ASTRON
Registration Number:	1426342	AUTO-SOFT
Registration Number:	1197782	BARATRON
Registration Number:	1686134	ENI
Registration Number:	1686133	ENI
Registration Number:	2378581	HPS
Registration Number:	2759890	I-BARATRON
Registration Number:	1992094	I-MAG
Registration Number:	2403559	LIQUOZON
Registration Number:	1646730	MASS-FLO
Registration Number:	3336530	MKS
Registration Number:	3229845	MKS
Registration Number:	1317863	MKS
Registration Number:	2697197	MKS
Registration Number:	1309825	M K S

TRADEMARK

Property Type	Number	Word Mark
Registration Number:	2697220	MKS TECHNOLOGY FOR PRODUCTIVITY
Registration Number:	876976	MKS BARATRON
Registration Number:	2357312	MKS INSTRUMENTS
Registration Number:	2082429	MKS INSTRUMENTS
Registration Number:	1372214	MKS INSTRUMENTS, INC.
Registration Number:	2477990	NOVA
Registration Number:	3283554	O3MEGA
Registration Number:	2562383	OPTIMA
Registration Number:	4734534	PARAGON
Registration Number:	2641184	PR INDEX
Registration Number:	3134363	R*EVOLUTION
Registration Number:	2309951	RESIST-TORR
Registration Number:	2758997	SEMOZON
Registration Number:	2399419	SMARTMATCH
Registration Number:	2726193	SMARTPOWER
Registration Number:	2610410	SPECTRUM
Registration Number:	3172300	SUREPOWER
Registration Number:	2902263	TOOLWEB
Registration Number:	2759679	TRU-FLO
Registration Number:	1661469	VACUUM SENTRY
Registration Number:	2472686	VI PROBE
Registration Number:	2534391	CONDUCTRON
Registration Number:	1954345	CONVECTRON
Registration Number:	2542586	GRANVILLE-PHILLIPS
Registration Number:	2293275	MICRO-ION
Registration Number:	2709156	MINI-CONVECTRON
Registration Number:	4077599	SIMPLICITY SOLUTIONS
Registration Number:	4074673	SIMPLICITY SOLUTIONS
Registration Number:	1838365	STABIL-ION
Registration Number:	4429764	VQI
Registration Number:	4302521	VQM
Registration Number:	4405626	PRECISIVE
Registration Number:	4756926	SPIRIT-NOPA
Registration Number:	4625704	VANTAGE
Registration Number:	4581802	TALON
Registration Number:	4469370	SPIRIT
Registration Number:	4330521	EXCELSIOR
Registration Number:	4330520	S SPECTRA-PHYSICS

Property Type	Number	Word Mark
Registration Number:	2130320	VELOCITY
Registration Number:	1685763	V
Registration Number:	1687057	NEW FOCUS
Registration Number:	4263476	DATUM
Registration Number:	4309491	QUASAR
Registration Number:	4129651	INSIGHT
Registration Number:	4073450	CORION
Registration Number:	4032802	NSTRUCT
Registration Number:	3370293	EXCELSIOR
Registration Number:	3345264	EXPLORER
Registration Number:	3541802	IQ DAMPER
Registration Number:	3294809	IQ DAMPING TECHNOLOGY
Registration Number:	3190279	SMARTTABLE
Registration Number:	2078888	ILX LIGHTWAVE
Registration Number:	3330829	MATISSE
Registration Number:	3340848	PULSESCOUT
Registration Number:	3058186	EMPOWER
Registration Number:	3712940	SOLARYX
Registration Number:	3926012	HYBRYX
Registration Number:	3481639	SOLSTICE
Registration Number:	3468777	PULSEO
Registration Number:	2904099	NEWPORT RESOURCE
Registration Number:	2780305	SPITFIRE
Registration Number:	2581563	MAI TAI
Registration Number:	2622866	ORIEL
Registration Number:	2733651	
Registration Number:	2321689	DYNAMYX
Registration Number:	2444644	D-LOK
Registration Number:	2236152	VALUMAX
Registration Number:	2191793	MILLENNIA
Registration Number:	2103240	ORION
Registration Number:	2099353	ULTIMA
Registration Number:	1852963	LOK-TO-CLOCK
Registration Number:	1759090	TSUNAMI
Registration Number:	1640907	BEAMLOK
Registration Number:	1661478	SPECTRA-PHYSICS
Registration Number:	1654202	S
Registration Number:	1558877	NEWPORT

Property Type	Number	Word Mark
Registration Number:	1490971	INSTASPEC
Registration Number:	1355510	SANETTA
Registration Number:	772271	SPECTRA-PHYSICS
Registration Number:	772270	
Serial Number:	85684812	MKSINST
Serial Number:	86614980	MULTIGAS
Serial Number:	86671327	PICOLIS
Serial Number:	86619809	GUARDIAN
Serial Number:	86461443	S
Serial Number:	86461515	SPECTRA-PHYSICS
Serial Number:	86173562	SPIRIT-OPA
Serial Number:	86072113	ASCEND

CORRESPONDENCE DATA

Fax Number: 2123037064

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: 212.318.6824

Email: christinedionne@paulhastings.com

Correspondent Name: Christine Dionne c/o Paul Hastings LLP

Address Line 1: 200 Park Avenue

Address Line 4: New York, NEW YORK 10166

ATTORNEY DOCKET NUMBER: 91825.00063 (TERM)

NAME OF SUBMITTER: Christing Dionne

SIGNATURE: /Christine Dionne/

DATE SIGNED: 05/03/2016

Total Attachments: 7

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TRADEMARK SECURITY AGREEMENT

Trademark Security Agreement, dated as of April 29, 2016 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Trademark Security Agreement"), by MKS INSTRUMENTS, INC. and NEWPORT CORPORATION (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").

W I T N E S S E T H:

WHEREAS, the Grantor is party to that certain Security Agreement dated as of the date hereof (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), by and among the Borrower, the other Grantors party thereto and the Collateral Agent, in favor of the Collateral Agent, pursuant to which the Grantor is required to execute and deliver to the Collateral Agent this Trademark 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 Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Credit Agreement or the Security Agreement 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 Trademark 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 Trademarks of the Grantor listed on Schedule I attached hereto; and
- (b) all products and Proceeds of any of the foregoing (together with clause (a), collectively, the "Trademarks").

SECTION 3. The Security Agreement. The security interests granted pursuant to this Trademark Security Agreement are granted in conjunction with the security interests granted to the Collateral Agent pursuant to the Security Agreement, and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interests in the Trademarks made and granted hereby are more fully set forth in the Security Agreement. In the event that any provision of this Trademark 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 otherwise required pursuant to, Section 6.11 thereof, the Collateral Agent shall, at the expense of the Grantor, execute, acknowledge, and deliver to the Grantor an instrument in writing in recordable form releasing the lien on and security interest in the applicable Trademarks under this

Trademark Security Agreement and any other documents required to evidence the termination of the Collateral Agent's interest in the applicable Trademarks.

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 TRADEMARK 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 TRADEMARK SECURITY AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY TO THIS TRADEMARK SECURITY AGREEMENT TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.**

SECTION 6. Waivers; Amendments; Modifications. Neither this Trademark 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 Trademark Security Agreement shall be in writing and given as provided in Section 6.01 of the Security Agreement.

SECTION 8. Counterparts; Effectiveness. This Trademark 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 Trademark 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 Trademark Security Agreement shall be effective as delivery of an original executed counterpart of this Trademark Security Agreement. This Trademark Security Agreement shall become effective as to the Grantor when a counterpart hereof executed on behalf of the Grantor 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 Grantor and the Collateral Agent and their respective permitted successors and assigns, and shall inure to the benefit of the Grantor, the Collateral Agent and the other Secured Parties and their respective permitted successors and assigns, except that the Grantor shall not have the right to assign or transfer its 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: *Seth H. Bagshaw*
Name: Seth H. Bagshaw
Title: Vice President and CFO

NEWPORT CORPORATION,
as a Grantor

By: *Seth H. Bagshaw*
Name: Seth H. Bagshaw
Title: President

BARCLAYS BANK PLC,
as the Collateral Agent

By: 
Name: Robert Chen
Title: Managing Director

[Signature Page to Term Loan Trademark Security Agreement]

TRADEMARK
REEL: 005784 FRAME: 0305

Schedule I
to
TRADEMARK SECURITY AGREEMENT
UNITED STATES TRADEMARK REGISTRATIONS AND APPLICATIONS

Trademark Applications/Registrations

OWNER	APPLICATION NUMBER	REGISTRATION NUMBER	TRADEMARK
MKS Instruments, Inc.	78/793063	3341575	AIRGARD
MKS Instruments, Inc.	73/718856	1524257	ASTEX
MKS Instruments, Inc.	75/295047	2237573	ASTRON
MKS Instruments, Inc.	73/564789	1426342	AUTO-SOFT
MKS Instruments, Inc.	73/319899	1197782	BARATRON
MKS Instruments, Inc.	74/096557	1686134	ENI
MKS Instruments, Inc.	74/096491	1686133	ENI (Stylized)
MKS Instruments, Inc.	75/550234	2378581	HPS
MKS Instruments, Inc.	76/331799	2759890	i-BARATRON
MKS Instruments, Inc.	74/614232	1992094	I-MAG
MKS Instruments, Inc.	75/694345	2403559	LIQUOZON
MKS Instruments, Inc.	74/074899	1646730	MASS-FLO
MKS Instruments, Inc.	78/722681	3336530	MKS
MKS Instruments, Inc.	78/911394	3229845	MKS
MKS Instruments, Inc.	73/460587	1317863	MKS (AND DESIGN)
MKS Instruments, Inc.	76/260293	2697197	MKS (AND DESIGN)
MKS Instruments, Inc.	73/460592	1309825	MKS (STYLIZED)
MKS Instruments, Inc.	76/271135	2697220	MKS and Design + Tag Line
MKS Instruments, Inc.	72/248716	876976	MKS BARATRON
MKS Instruments, Inc.	75/706479	2357312	MKS INSTRUMENTS
MKS Instruments, Inc.	75/060380	2082429	MKS INSTRUMENTS and Design
MKS Instruments, Inc.	73/460591	1372214	MKS INSTRUMENTS, INC.
MKS Instruments, Inc.	85/684812		MKSINST
MKS Instruments, Inc.	86/614980		MULTIGAS
MKS Instruments, Inc.	76/106380	2477990	NOVA
MKS Instruments, Inc.	78/562042	3283554	O3MEGA
MKS Instruments, Inc.	75/942803	2562383	OPTIMA
MKS Instruments, Inc.	86/368162	4734534	PARAGON
MKS Instruments, Inc.	75/830825	2641184	PR INDEX
MKS Instruments, Inc.	78/613986	3134363	R*EVOLUTION
MKS Instruments, Inc.	75/524214	2309951	RESIST-TORR
MKS Instruments, Inc.	78/173035	2758997	SEMOZON
MKS Instruments, Inc.	75/694344	2399419	SMARTMATCH
MKS Instruments, Inc.	75/694325	2726193	SMARTPOWER
MKS Instruments, Inc.	76/050428	2610410	SPECTRUM
MKS Instruments, Inc.	78/562083	3172300	SUREPOWER
MKS Instruments, Inc.	78/164487	2902263	TOOLWEB
MKS Instruments, Inc.	76/257907	2759679	TRU-FLO
MKS Instruments, Inc.	73/776533	1661469	VACUUM SENTRY
MKS Instruments, Inc.	75/565156	2472686	VI PROBE & DESIGN

OWNER	APPLICATION NUMBER	REGISTRATION NUMBER	TRADEMARK
MKS Instruments, Inc.	75/334,856	2,534,391	CONDUCTRON
MKS Instruments, Inc.	74/558,972	1,954,345	CONVECTRON
MKS Instruments, Inc.	76/121,929	2,542,586	GRANVILLE-PHILLIPS
MKS Instruments, Inc.	75/334,855	2,293,275	MICRO-ION
MKS Instruments, Inc.	76/420,707	2,709,156	MINI-CONVECTRON
MKS Instruments, Inc.	77/966,895	4,077,599	SIMPLICITY SOLUTIONS
MKS Instruments, Inc.	77/966,899	4,074,673	SIMPLICITY SOLUTIONS & DESIGN
MKS Instruments, Inc.	74/250,891	1,838,365	STABIL-ION
MKS Instruments, Inc.	85/700,623	4,429,764	VQI
MKS Instruments, Inc.	85/508,144	4,302,521	VQM
MKS Instruments, Inc.	85/676,756	4,405,626	PRECISIVE
Newport Corporation		4,756,926	SPIRIT-NOPA
Newport Corporation		4,625,704	VANTAGE
Newport Corporation		4,581,802	TALON
Newport Corporation		4,469,370	SPIRIT
Newport Corporation		4,330,521	EXCELSIOR (International Class 10)
Newport Corporation		4,330,520	SPECTRA-PHYSICS & S Design
Newport Corporation		2,130,320	VELOCITY
Newport Corporation		1,685,763	V (& DESIGN)
Newport Corporation		1,687,057	NEW FOCUS
Newport Corporation		4,263,476	DATUM
Newport Corporation		4,309,491	QUASAR
Newport Corporation		4,129,651	INSIGHT
Newport Corporation		4,073,450	CORION
Newport Corporation		4,032,802	NSTRUCT
Newport Corporation		3,370,293	EXCELSIOR (International Class 9)
Newport Corporation		3,345,264	EXPLORER
Newport Corporation		3,541,802	IQ DAMPER
Newport Corporation		3,294,809	IQ DAMPING TECHNOLOGY
Newport Corporation		3,190,279	SMARTTABLE
Newport Corporation		2,078,888	ILX LIGHTWAVE
Newport Corporation		3,330,829	MATISSE
Newport Corporation		3,340,848	PULSESCOUT
Newport Corporation		3,058,186	EMPOWER
Newport Corporation		3,712,940	SOLARYX
Newport Corporation		3,926,012	HYBRYX
Newport Corporation		3,481,639	SOLSTICE
Newport Corporation		3,468,777	PULSEO
Newport Corporation		2,904,099	NEWPORT RESOURCE
Newport Corporation		2,780,305	SPITFIRE
Newport Corporation		2,581,563	MAI TAI
Newport Corporation		2,622,866	ORIEL
Newport Corporation		2,733,651	Design Only

OWNER	APPLICATION NUMBER	REGISTRATION NUMBER	TRADEMARK
Newport Corporation		2,321,689	DYNAMYX
Newport Corporation		2,444,644	D-LOK
Newport Corporation		2,236,152	VALUMAX
Newport Corporation		2,191,793	MILLENNIA
Newport Corporation		2,103,240	ORION
Newport Corporation		2,099,353	ULTIMA
Newport Corporation		1,852,963	LOK-TO-CLOCK
Newport Corporation		1,759,090	TSUNAMI
Newport Corporation		1,640,907	BEAMLOK
Newport Corporation		1,661,478	SPECTRA-PHYSICS
Newport Corporation		1,654,202	S Design only
Newport Corporation		1,558,877	NEWPORT and Design
Newport Corporation		1,490,971	INSTASPEC
Newport Corporation		1,352,510	QUANTA-RAY and Design
Newport Corporation		772,271	SPECTRA-PHYSICS
Newport Corporation		772,270	S Design Only
Newport Corporation	86/671,327		PICOLIS
Newport Corporation	86/619,809		GUARDIAN
Newport Corporation	86/461,443		S Design (Spectra-Physics "S" logo in the color blue)
Newport Corporation	86/461,515		SPECTRA-PHYSICS & S Design (in the color blue)
Newport Corporation	86/173,562		SPIRIT-OPA
Newport Corporation	86/072,113		ASCEND