UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): September 27, 2019

MKS Instruments, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation) 000-23621 (Commission File Number) 04-2277512 (I.R.S. Employer Identification No.)

2 Tech Drive, Suite 201, Andover, Massachusetts (Address of principal executive offices)

01810 (Zip Code)

Registrant's telephone number, including area code: 978-645-5500

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

	Trading	Name of each exchange
Title of each class	Symbol(s)	on which registered
Common Stock, no par value	MKSI	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On September 27, 2019, MKS Instruments, Inc., a Massachusetts corporation (the "Company"), entered into Amendment No. 6, (the "Repricing Amendment") to the Term Loan Credit Agreement, dated as of April 29, 2016, by and among the Company, the lenders party thereto (the "Lenders"), and Barclays Bank PLC, as administrative agent and collateral agent for the lenders (as amended from time to time, including by Amendment No. 1, dated June 9, 2016, Amendment No. 2, dated December 14, 2016, Amendment No. 3, dated July 6, 2017, Amendment No. 4, dated April 11, 2018, Amendment No. 5, dated February 1, 2019 and the Repricing Amendment, the "Credit Agreement"). The Repricing Amendment combined the two existing tranches of the Company's term loans under the Credit Agreement into one tranche of term loans, decreased the applicable margin for all of the Company's term loans under the Credit Agreement as further described below and set the maturity date for all of the Company's term loans (as defined in the Credit Agreement) bear interest at a rate equal to the Adjusted Eurodollar Rate (as defined in the Credit Agreement), with a floor of 0.0%, plus a margin of 1.75%, and (ii) Base Rate Loans (as defined in the Credit Agreement) bear interest at a rate equal to the Credit Agreement) bear interest at a rate equal to 0.75%. The period in which a prepayment premium may be required for a "Repricing Transaction" (as defined in the Credit Agreement) was reset to six months after the effective date of the Repricing Amendment. In connection with the execution of the Repricing Amendment, the Company paid certain fees and expenses to Barclays Bank PLC.

In addition, on September 27, 2019, the Company prepaid \$50,000,000 of principal under the Credit Agreement, reducing the outstanding principal under the Credit Agreement to approximately \$897 million as of September 27, 2019, from approximately \$947 million at June 30, 2019.

The foregoing description of the Repricing Amendment does not purport to be complete and is qualified in its entirety by reference to the full text of the Repricing Amendment, which is filed as Exhibit 10.1 to this Current Report on Form 8-K and incorporated herein by reference.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The disclosure under Item 1.01 of the Current Report on Form 8-K is incorporated herein by reference.

Item 7.01 Regulation FD Disclosure.

On October 1, 2019, the Company issued a press release announcing the execution of the Repricing Amendment. A copy of the press release is attached as Exhibit 99.1 to this Current Report. The information in this Item 7.01 of this Current Report on Form 8-K, including the press release attached hereto as Exhibit 99.1, is being furnished pursuant to Item 7.01 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, except as expressly set forth in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1	Amendment No. 6 to Term Loan Credit Agreement, dated as of September 27, 2019, among the Company, the other loan parties party thereto, Barclays Bank PLC, as administrative agent, collateral agent and fronting bank, and each participating lender party thereto.
99.1	Press Release dated October 1, 2019
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MKS Instruments, Inc.

By: /s/ Kathleen F. Burke

Name: Kathleen F. Burke

Title: Senior Vice President, General Counsel & Secretary

September 30, 2019

Exhibit 10.1

EXECUTION VERSION

AMENDMENT NO. 6 TO TERM LOAN CREDIT AGREEMENT

dated as of

September 27, 2019,

among

MKS INSTRUMENTS, INC., as the Borrower,

the other Loan Parties party hereto,

the Participating Lenders party hereto,

and

BARCLAYS BANK PLC, as Administrative Agent, Lead Arranger and Bookrunner

AMENDMENT NO. 6 TO TERM LOAN CREDIT AGREEMENT

This AMENDMENT NO. 6 TO TERM LOAN CREDIT AGREEMENT, dated as of September 27, 2019 (this "<u>Agreement</u>"), by and among MKS Instruments, Inc., a Massachusetts corporation (the "<u>Borrower</u>"), the other Loan Parties party hereto, Barclays Bank PLC, as the administrative agent and the collateral agent (in such capacity, the "<u>Administrative Agent</u>") under the Credit Agreement referred to below, and each Participating Lender (as defined below) party hereto.

RECITALS:

WHEREAS, reference is made to the Term Loan Credit Agreement, dated as of April 29, 2016 (as amended by Amendment No. 1 to Term Loan Credit Agreement, dated as of June 9, 2016, among the Borrower, the Loan Parties party thereto, the Administrative Agent and the other parties thereto, by Amendment No. 2 to Term Loan Credit Agreement, dated as of December 14, 2016, among the Borrower, the Loan Parties party thereto, the Administrative Agent and the other parties thereto, and by Amendment No. 3 to Term Loan Credit Agreement, dated as of July 6, 2017, among the Borrower, the Loan Parties party thereto, the Administrative Agent and the other parties thereto, the Administrative Agent and the other parties thereto, the Administrative Agent and the other parties thereto, Amendment No. 4 to Term Loan Credit Agreement, dated as of April 11, 2018, among the Borrower, the Loan Parties party thereto, the Administrative Agent and the other parties thereto and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among the Borrower, the Lenders from time to time party thereto and the Administrative Agent (capitalized terms used but not defined herein having the meaning provided in the Credit Agreement), pursuant to which the Lenders provided the Borrower with Term Loans in an aggregate initial principal amount of (i) \$780,000,000 (the "Initial Term Loans") on the Closing Date and (ii) \$650,000,000 (the "Tranche B-5 Term Loans") on the Amendment No. 5 Effective Date;

WHEREAS, concurrently with the effectiveness of this Agreement, the Borrower intends to make a voluntary prepayment, which will be applied to each of the Tranche B-4 Term Loans and the Tranche B-5 Term Loans on a pro rata basis, in aggregate amount of \$50,000,000 (the "<u>Prepayment</u>");

WHEREAS, this Agreement constitutes a Refinancing Amendment, and the Borrower is hereby notifying the Administrative Agent that it is requesting the establishment of Other Term Commitments and/or Other Term Loans, in each case, pursuant to Section 2.15 of the Credit Agreement;

WHEREAS, giving effect to the consummation of the Prepayment concurrently with the effectiveness of this Agreement, the Borrower requests Other Term Loans in an aggregate principal amount of \$896,838,687.59 (the <u>"Tranche B-6 Term Facility</u>"; and the loans thereunder, the "<u>Tranche B-6 Term Loans</u>"; the commitments in respect of such Tranche B-6 Term Loans, the <u>"Tranche B-6 Term Commitments</u>"; and the Participating Lenders with Tranche B-6 Term Commitments and any permitted assignees thereof, the "<u>Tranche B-6 Lenders</u>"), which will be available on the Amendment No. 6 Effective Date (as defined below) to (i) refinance all existing Tranche B-4 Term Loans outstanding under the Credit Agreement (the "<u>Existing Tranche B-4 Term Loans</u>") and (ii) refinance all existing Tranche B-5 Term Loans outstanding under the Credit Agreement immediately prior to effectiveness of this Agreement (the "<u>Existing Tranche B-4 Term Loans</u>") and (the B-5 Term Loans"; together with the Existing Tranche B-4 Term Loans, the "<u>Existing Tranche B-5 Term Loans</u>"; together with the Existing Tranche B-4 Term Loans, the "<u>Existing Tranche B-5 Term Loans</u>"; together with the Existing Tranche B-4 Term Loans, the "<u>Existing Term Loans</u>") and which Tranche B-6 Term Loans shall constitute Other Term Loans and Term Loans (as applicable) for all

purposes of the Credit Agreement and the other Loan Documents; it being understood that prior to giving effect to the consummation of the Prepayment, the aggregate principal amount of the (i) Existing Tranche B-4 Term Loans immediately prior to effectiveness of this Agreement is \$298,463,687.52 and (ii) Existing Tranche B-5 Term Loans immediately prior to effectiveness of this Agreement is \$648,375,000.07;

WHEREAS, each Lender holding Existing Term Loans under the Credit Agreement immediately prior to effectiveness of this Agreement (each, an "<u>Existing Lender</u>") executing and delivering a notice of participation in the Tranche B-4 Term Loans and/or the Tranche B-5 Term Loans, as applicable, in the form attached as <u>Exhibit A</u> hereto (a "<u>Tranche B-6 Participation Notice</u>") and electing the cashless settlement option therein (each such Lender in such capacity and with respect to the Existing Term Loans so elected, a "<u>Converting Lender</u>" and, together with each other Person executing and delivering a Tranche B-6 Participation Notice or otherwise providing a Tranche B-6 Term Commitment, the "<u>Participating Lenders</u>") shall be deemed to have exchanged on the Amendment No. 6 Effective Date the aggregate outstanding principal amount of its Existing Term Loans under the Credit Agreement for an equal aggregate principal amount of Tranche B-6 Term Loans under the Credit Agreement;

WHEREAS, the Borrower has appointed Barclays to act, and Barclays agrees to act, as lead arranger and bookrunner in respect of the Tranche B-6 Term Loans;

WHEREAS, Barclays, in its capacity as lead arranger and bookrunner (the "Lead Arranger"), agrees to act as fronting bank for the syndication of the Tranche B-6 Term Loans (in such capacity, the "Fronting Bank"), the Fronting Bank will purchase, and the Existing Lenders will sell to the Fronting Bank, immediately prior to effectiveness of this Agreement, (i) Existing Term Loans of Existing Lenders that do not execute and deliver a Tranche B-6 Participation Notice (the "<u>Non-Participating Lenders</u>") and (ii) Existing Term Loans of Existing Lenders that execute and deliver a Tranche B-6 Participation Notice and elect the cash settlement option therein (the "<u>Non-Converting Lenders</u>") (the Loans described in the foregoing clauses (i) and (ii), collectively, the "<u>Reallocated Loans</u>");

WHEREAS, to the extent there exist any Reallocated Loans, the Fronting Bank shall be deemed to exchange on the Amendment No. 6 Effective Date such Reallocated Loans on a cashless settlement basis for an equal aggregate principal amount of Tranche B-6 Term Loans under the Credit Agreement, and such Reallocated Loans shall promptly thereafter be purchased by Participating Lenders (other than Existing Lenders) (the "<u>New</u> <u>Lenders</u>"), Non-Converting Lenders, and Existing Lenders purchasing additional Tranche B-6 Term Loans, each in accordance with such Participating Lenders' respective Tranche B-6 Participation Notice and as allocated by the Lead Arranger (with the consent of the Borrower, not to be unreasonably withheld or delayed); and

WHEREAS, contemporaneously with the effectiveness of the Tranche B-6 Term Commitments the Borrower wishes to (a) make certain amendments to the Credit Agreement to provide for the incurrence of the Tranche B-6 Term Loans and (b) make certain other modifications to the Credit Agreement set forth herein.

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

- 1. <u>Credit Agreement Amendments</u>. Effective as of the Amendment No. 6 Effective Date, the Credit Agreement is hereby amended as follows:
 - (a) Section 1.1 of the Credit Agreement is amended by inserting the following new definitions in their correct alphabetical order:

"<u>Amendment No. 6</u> means Amendment No. 6 to this Agreement, dated as of September 27, 2019, among the Borrower, the other Loan Parties party thereto, the Lenders party thereto, and the Administrative Agent.

"Amendment No. 6 Effective Date" means the "Amendment No. 6 Effective Date" under and as defined in Amendment No. 6.

"Tranche B-6 Commitments" means the "Tranche B-6 Term Commitments" as defined in Amendment No. 6.

"Tranche B-6 Term Facility" means the "Tranche B-6 Term Facility" as defined in Amendment No. 6.

"Tranche B-6 Term Loans" means the "Tranche B-6 Term Loans" as defined in Amendment No. 6.

The definition of "Adjusted LIBOR Floor" is hereby amended and restated in its entirety as follows:

"<u>Adjusted LIBOR Floor</u>" means 0.00% per annum.

(b)

(c) The definition of "Applicable Margin" is hereby amended and restated in its entirety as follows:

"<u>Applicable Margin</u>" means a percentage *per annum* equal to (i) for Tranche B-6 Term Loans that are Eurodollar Loans, 1.75% and (ii) for Tranche B-6 Term Loans that are Base Rate Loans, 0.75%.

(d) The definition of "Maturity Date" is hereby amended and restated in its entirety as follows:

"Maturity Date" means February 2, 2026.

(e) The definition of "Term Commitment" is hereby amended and restated in its entirety as follows:

"<u>Term Commitment</u>" means, with respect to any Lender, (i) such Lender's Initial Term Commitment, (ii) such Lender's Tranche B-1 Commitment, (iii) such Lender's Tranche B-2 Commitment, (iv) such Lender's Tranche B-3 Commitment, (v) such Lender's Tranche B-4 Commitment (vi) such Lender's Tranche B-5 Commitment and (vii) such Lender's Tranche B-6 Commitment.

(f) The definition of "Term Loans" is hereby amended and restated in its entirety as follows:

"Term Loans" means the term loans made by the Term Lenders to the Borrower pursuant to Section 2.01(b); provided that (i) from and after the effectiveness of Amendment No. 1, "Term Loans" shall mean all Tranche B-1 Term Loans made on the Amendment No. 1 Effective Date (through exchange or otherwise) pursuant to Amendment No. 1, (ii) from and after the effectiveness of Amendment No. 2, "Term Loans" shall mean all Tranche B-2 Term Loans made on the Amendment No. 2 Effective Date (through exchange or otherwise) pursuant to Amendment No. 2, (iii) from and after the effectiveness of Amendment No. 3, "Term Loans" shall mean all Tranche B-3 Term Loans made on the Amendment No. 3 Effective Date (through exchange or otherwise) pursuant to Amendment No. 3, (iv) from and after the effectiveness of Amendment No. 4, "Term Loans" shall mean all Tranche B-4 Term Loans made on the Amendment No. 4 Effective Date (through exchange or otherwise) pursuant to Amendment No. 4, (v) from and after the effectiveness of Amendment No. 5, "Term Loans" shall mean (x) all Tranche B-4 Term Loans outstanding as of the Amendment No. 5 Effective Date plus (y) all Tranche B-5 Term Loans made on the Amendment No. 5 Effective Date pursuant to Amendment No. 5 and (vi) from and after the effectiveness of Amendment No. 6, "Term Loans" shall mean all Tranche B-6 Term Loans made on the Amendment No. 6 Effective Date (through exchange or otherwise) pursuant to Amendment No. 5 and (vi) from and after the effectiveness of Amendment No. 6, "Term Loans" shall mean all Tranche B-6 Term Loans made on the Amendment No. 6 Effective Date (through exchange or otherwise) pursuant to Amendment No. 6.

(g) The definition of "Term Facility" is hereby amended and restated in its entirety as follows:

"Term Facility" means, the Tranche B-6 Term Facility.

(h) Section 2.01 of the Credit Agreement is hereby amended and restated and replaced in its entirety with the following:

"Subject solely to the terms and conditions set forth herein, each Lender with an Initial Term Commitment severally made a Term Loan to the Borrower in Dollars on the Closing Date in a principal amount equal to its Initial Term Commitment. The aggregate principal amount of Initial Term Commitments for all Lenders was equal to the Term Committed Amount. For the avoidance of doubt, the Borrower made one borrowing under the Initial Term Commitments, which was on the Closing Date, and each Lender's Initial Term Commitment terminated immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Initial Term Commitment on such date. Subject to the terms and conditions hereof and of Amendment No. 1, each Lender with a Tranche B-1 Commitment severally made or exchanged, as applicable, on the Amendment No. 1 Effective Date, a Tranche B-1 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-1 Commitment. The aggregate principal amount of Tranche B-1 Commitments as of the Amendment No. 1 Effective Date for all Lenders was \$730,000,000. For the avoidance of doubt, the Borrower made one borrowing under the Tranche B-1 Commitments, which was on the Amendment No. 1 Effective Date, and each Lender's Tranche B-1 Commitment terminated immediately and without further action on the Amendment No. 1 Effective Date after giving effect to the funding of such Lender's Tranche B-1 Commitment on such date. Subject to the terms and conditions hereof and of Amendment No. 2, each Lender with a Tranche B-2

Commitment severally made or exchanged, as applicable, on the Amendment No. 2 Effective Date, a Tranche B-2 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-2 Commitment. The aggregate principal amount of Tranche B-2 Commitments as of the Amendment No. 2 Effective Date for all Lenders was \$628,175,000. For the avoidance of doubt, the Borrower made one borrowing under the Tranche B-2 Commitments, which was on the Amendment No. 2 Effective Date, and each Lender's Tranche B-2 Commitment terminated immediately and without further action on the Amendment No. 2 Effective Date after giving effect to the funding of such Lender's Tranche B-2 Commitment on such date. Subject to the terms and conditions hereof and of Amendment No. 3, each Lender with a Tranche B-3 Commitment severally made or exchanged, as applicable, on the Amendment No. 3 Effective Date, a Tranche B-3 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-3 Commitment. The aggregate principal amount of Tranche B-3 Commitments as of the Amendment No. 3 Effective Date for all Lenders was \$573,463,687.50. For the avoidance of doubt, the Borrower made one borrowing under the Tranche B-3 Commitments, which was on the Amendment No. 3 Effective Date, and each Lender's Tranche B-3 Commitment terminated immediately and without further action on the Amendment No. 3 Effective Date after giving effect to the funding of such Lender's Tranche B-3 Commitment on such date. Subject to the terms and conditions hereof and of Amendment No. 4, each Lender with a Tranche B-4 Commitment severally made or exchanged, as applicable, on the Amendment No. 4 Effective Date, a Tranche B-4 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-4 Commitment. The aggregate principal amount of Tranche B-4 Commitments as of the Amendment No. 4 Effective Date for all Lenders was \$348,463,687.50. For the avoidance of doubt, the Borrower made only one borrowing under the Tranche B-4 Commitments, which was on the Amendment No. 4 Effective Date and each Lender's Tranche B-4 Commitment terminated immediately and without further action on the Amendment No. 4 Effective Date after giving effect to the funding of such Lender's Tranche B-4 Commitment on such date. Subject to the terms and the conditions hereof and of Amendment No. 5, each Lender with a Tranche B-5 Commitment severally made, on the Amendment No. 5 Effective Date, a Tranche B-5 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-5 Commitment. The aggregate principal amount of Tranche B-5 Commitments as of the Amendment No. 5 Effective Date for all Lenders was \$650,000,000. For the avoidance of doubt, the Borrower made only one borrowing under the Tranche B-5 Commitments, which was on the Amendment No. 5 Effective Date and each Lender's Tranche B-5 Commitment terminated immediately and without further action on the Amendment No. 5 Effective Date after giving effect to the funding of such Lender's Tranche B-5 Commitment on such date. Subject to the terms and conditions hereof and of Amendment No. 6, each Lender with a Tranche B-6 Commitment severally agrees to make or exchange, as applicable, on the Amendment No. 6 Effective Date, a Tranche B-6 Term Loan to the Borrower in Dollars in an amount equal to such Lender's Tranche B-6 Commitment. The aggregate principal amount of Tranche B-6 Commitments as of the Amendment No. 6 Effective Date for all Lenders is \$896,838,687.59. The Borrower may make only one borrowing under the Tranche B-6 Commitments, which shall be on the Amendment No. 6 Effective Date and each Lender's Tranche B-6 Commitment shall terminate immediately and without further action on the Amendment No. 6 Effective Date after giving effect to the funding of such Lender's Tranche B-6 Commitment on such date."

- (i) Section 2.07 of the Credit Agreement is amended by (i) replacing the text "Tranche B-5" appearing therein with the text "Tranche B-6" and (ii) replacing the text "Amendment No. 5 Effective Date" appearing therein with the text "Amendment No. 6 Effective Date".
- (j) Section 2.08(f) of the Credit Agreement is hereby amended and restated and replaced in its entirety with the following:

"Prepayment Premium. In the event that, on or prior to the date that is six (6) months after the Amendment No. 6 Effective Date, the Borrower (x) makes any prepayment of Term Loans in connection with any Repricing Transaction or (y) effects any amendment of this Agreement resulting in a Repricing Transaction, the Borrower shall pay to the Administrative Agent, for the ratable account of each applicable Term Lender, (I) in the case of clause (x), a prepayment premium of 1.00% of the amount of the Term Loans being prepaid and (II) in the case of clause (y), a payment equal to 1.00% of the aggregate amount of the applicable Term Loans outstanding immediately prior to such amendment that are subject to such Repricing Transaction."

(k) Article 9 of the Credit Agreement is hereby amended by adding the following text as Section 9.15 thereto:

Section 9.15 "<u>Acknowledgement Regarding Any Supported QFCs</u>. To the extent that the Loan Documents provide, through a guarantee or otherwise, for hedge agreements or any other agreement or instrument that is a QFC (such support, "<u>QFC Credit Support</u>" and each such QFC a "<u>Supported QFC</u>"), the parties acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated thereunder, the "<u>U.S. Special Resolution Regimes</u>") in respect of such Supported QFC and QFC Credit Support (with the provisions below applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of New York and/or of the United States or any other state of the United States):

(a) In the event a Covered Entity that is party to a Supported QFC (each, a "<u>Covered Party</u>") becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights

under the Loan Documents that might otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any Covered Party with respect to a Supported QFC or any QFC Credit Support.

(b) As used in this <u>Section 9.15</u>, the following terms have the following meanings:

"BHC Act Affiliate" of a party means an "affiliate" (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

"Covered Entity" means any of the following:

i. a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);

ii. a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or

iii. a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

"<u>Default Right</u>" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

"<u>QFC</u>" has the meaning assigned to the term "qualified financial contract" in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D)."

- 2. <u>**Tranche B-6 Term Loans**</u>. Subject to the terms and conditions set forth herein, each Tranche B-6 Lender severally agrees to exchange Existing Term Loans for Tranche B-6 Term Loans and/or make Tranche B-6 Term Loans to the Borrower in a single borrowing in Dollars on the Amendment No. 6 Effective Date. The Tranche B-6 Term Loans shall be subject to the following terms and conditions:
 - (a) Terms Generally. Other than as set forth herein, for all purposes under the Credit Agreement and the other Loan Documents, the Tranche B-6 Term Loans shall have the same terms as the Term Loans made on the Closing Date and shall be treated for purposes of voluntary and mandatory prepayments (including for scheduled principal payments) and all other terms as Term Loans made on the Closing Date. The parties acknowledge that each of the Initial Term Loans, Tranche B-1 Term Loans, Tranche B-2 Term Loans, Tranche B-3 Term Loans, Tranche B-4 Term Loans, Tranche B-5 Term Loans and Tranche B-6 Term Loans may be referred to as "Tranche B-6 Loans" solely for administrative and operational purposes of the Administrative Agent, and that such references shall not affect the rights or obligations of the Borrower under the Credit Agreement and the Term Notes.

- (b) **Proposed Borrowing**. This Agreement represents a request by the Borrower to borrow Tranche B-6 Term Loans from the Tranche B-6 Lenders as set forth on the applicable Notice of Borrowing to be delivered by the Borrower under the Credit Agreement.
- (c) New Lenders. Each New Lender (i) confirms that it has received a copy of the Credit Agreement and the other Loan Documents and the exhibits and schedules thereto, together with copies of the financial statements referred to therein and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Agreement; (ii) agrees that it will, independently and without reliance upon the Administrative Agent, the Collateral Agent, or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement; (iii) appoints and authorizes the Administrative Agent and the Collateral Agent to take such action as agent on its behalf and to exercise such powers under the Credit Agreement and the other Loan Documents as are delegated to the Administrative Agent or the Collateral Agent, as the case may be, by the terms thereof, together with such powers as are reasonably incidental thereto; and (iv) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender, as the case may be. Each New Lender acknowledges and agrees that it shall become a "Lender" under, and for all purposes of, the Credit Agreement and the other Loan Documents, and shall be subject to and bound by the terms thereof, and shall have all rights of a Lender thereunder.
- (d) **Credit Agreement Governs.** Except as set forth in this Agreement, the Tranche B-6 Term Loans shall otherwise be subject to the provisions of the Credit Agreement and the other Loan Documents.

(e) Exchange Mechanics.

- (i) On the Amendment No. 6 Effective Date, upon the satisfaction or waiver of the conditions set forth in Section 3 hereof, the outstanding amount of Existing Term Loans of each Converting Lender exchanged pursuant to this Agreement shall be deemed to be exchanged for an equal outstanding amount of Tranche B-6 Term Loans under the Credit Agreement. Such exchange shall be effected by book entry in such manner, and with such supporting documentation, as may be reasonably determined by the Administrative Agent in its sole discretion. It is acknowledged and agreed that each Converting Lender has agreed to accept as satisfaction in full of its right to receive payment on the outstanding amount of Existing Term Loans of such Converting Lender the conversion of its Existing Term Loans into Tranche B-6 Term Loans in accordance herewith, in lieu of the prepayment amount that would otherwise be payable by the Borrower pursuant to the Credit Agreement in respect of the outstanding amount of Existing Term Loans of such Converting Lender. Notwithstanding anything to the contrary herein, each Converting Lender hereby waives any break funding payments in respect of such Lender's Existing Term Loans.
- (ii) To the extent there exist any Reallocated Loans, (x) on the Amendment No. 6 Effective Date, the Fronting Bank shall provide such Reallocated Loans to the Borrower in the amount set forth opposite the Fronting Bank's name on Annex I hereto by purchase of Existing Term Loans in such amount and exchange for

Tranche B-6 Term Loans on a cashless settlement basis and (y) promptly following the Amendment No. 6 Effective Date (but not later than 30 days following the Amendment No. 6 Effective Date (or such later date as may be agreed to by the Fronting Bank in its sole discretion)), each New Lender, each Non-Converting Lender and each Existing Lender purchasing additional Tranche B-6 Term Loans shall purchase Reallocated Loans from the Fronting Bank as directed by the Lead Arranger in accordance with such Participating Lender's Tranche B-6 Participation Notice and as allocated by the Lead Arranger. Purchases and sales of Reallocated Loans shall be without representations from the Fronting Bank other than as provided for in the relevant Assignment and Assumption.

- 3. <u>Effective Date Conditions</u>. This Agreement will become effective on the date (the "<u>Amendment No. 6 Effective Date</u>"), on which each of the following conditions have been satisfied (or waived by the Lead Arranger) in accordance with the terms therein:
 - (a) the Administrative Agent (or its counsel) shall have received from each of the Borrower and the Participating Lenders, either (i) a counterpart of this Agreement signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic transmission of a signed counterpart of this Agreement) that such party has signed a counterpart to this Agreement (which, in the case of the Participating Lenders, may be in the form of a Tranche B-6 Participation Notice);
 - (b) the Administrative Agent shall have received an executed Notice of Borrowing in accordance with the terms hereof and Section 2.02 of the Credit Agreement;
 - (c) the Administrative Agent shall have received fully executed and delivered Tranche B-6 Participation Notices from Participating Lenders and the Fronting Bank representing 100% of the aggregate outstanding principal amount of the Existing Term Loans;
 - (d) the Administrative Agent shall have received a certificate of the Borrower dated as of the Amendment No. 6 Effective Date signed by a Responsible Officer of the Borrower (i) (A) certifying and attaching the resolutions or similar consents adopted by the Borrower approving or consenting to this Agreement and the Tranche B-6 Term Loans, (B) certifying that the certificate or articles of organization or formation and by-laws or operating (or limited liability company) agreement of the Borrower either (x) have not been amended since the Amendment No. 5 Effective Date or (y) are attached as an exhibit to such certificate, and (C) certifying as to the incumbency and specimen signature of each officer executing this Agreement and any related documents on behalf of the Borrower and (ii) certifying as to the matters set forth in clauses (f) and (g) below;
 - (e) (i) the Administrative Agent shall have received (x) a consent fee, for the account of each Participating Lender in an amount equal to 0.25% of each such Participating Lender's Tranche B-6 Commitments (which may be payable in the form of original issue discount) and (y) all other fees and other amounts previously agreed to in writing by the Lead Arranger and the Borrower to be due on or prior to the Amendment No. 6 Effective Date, including, to the extent invoiced at least two (2) Business Days prior to the Amendment No. 6 Effective Date (or such later date as is reasonably agreed by the Borrower), legal fees and expenses and the fees and expenses of any other advisors in accordance with the terms of the Credit Agreement and (ii) all accrued interest and fees in respect of the Existing Term Loans outstanding immediately prior to effectiveness of this Agreement shall have been paid;

- (f) the representations and warranties of the Borrower and the other Loan Parties contained in <u>Article V</u> of the Credit Agreement and in any other Loan Document shall be (x) in the case of representations and warranties qualified by "materiality," "Material Adverse Effect" or similar language, true and correct in all respects on the Amendment No. 6 Effective Date and (y) in the case of all other representations and warranties, true and correct in all material respects, in each case, on and as of the Amendment No. 6 Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct on the basis set forth above as of such earlier date;
- (g) no Default or Event of Default shall exist on the Amendment No. 6 Effective Date before or after giving effect to the effectiveness of this Agreement and the incurrence of the Tranche B-6 Term Loans;
- (h) the Administrative Agent shall have received a solvency certificate executed by a Financial Officer of the Borrower, substantially in the form of Exhibit K to the Credit Agreement, dated and certifying as to solvency as of the Amendment No. 6 Effective Date;
- (i) the Prepayment shall have been made or consummated prior to, or shall be made or consummated substantially simultaneously with the effectiveness of this Agreement; and
- (j) the Loan Parties shall have provided the documentation and other information to the Lenders required by regulatory authorities under the applicable "know-your-customer" rules and regulations, including the Patriot Act, in each case at least three (3) Business Days prior to the Amendment No. 6 Effective Date, as has been requested to the Borrower in writing reasonably prior to the Amendment No. 6 Effective Date.
- 4. **<u>Representations and Warranties</u>**. By its execution of this Agreement, each Loan Party hereby represents and warrants that:
 - (a) such Loan Party has all requisite corporate or other organizational power and authority to execute, deliver and perform its obligations under this Agreement;
 - (b) the execution, delivery and performance by such Loan Party of this Agreement (x) have been duly authorized by all necessary corporate, partnership, limited liability company or other organizational action, and (y) do not and will not (i) contravene the terms of any of such Loan Party's Organization Documents, (ii) conflict with or result in any breach or contravention of, or the creation of any Lien (other than Permitted Liens) under, any Contractual Obligation to which such Loan Party is a party or any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject except in the case of this <u>clause (ii)</u> any such conflict, breach or contravention that would not reasonably be expected individually or in the aggregate to have a Material Adverse Effect or (iii) violate any Law, except in any case for such violations that would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect;

- (c) this Agreement has been duly executed and delivered by each Loan Party that is party hereto, and this Agreement constitutes a legal, valid and binding obligation of such Loan Party, enforceable against each Loan Party that is party thereto in accordance with its terms, except (i) as such enforceability may be limited by applicable bankruptcy, insolvency, examinership, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and (ii) that rights of acceleration and the availability of equitable remedies may be limited by equitable principles of general applicability (regardless of whether enforcement is sought by proceedings in equity or at law); and
- (d) both immediately before and after giving effect to the Amendment No. 6 Effective Date and the incurrence and/or exchange of the Tranche B-6 Term Loans, (i) the representations and warranties contained in the Credit Agreement and in the other Loan Documents shall be (x) in the case of representations and warranties qualified by "materiality," "Material Adverse Effect" or similar language, true and correct in all respects on the Amendment No. 6 Effective Date and (y) in the case of all other representations and warranties, true and correct in all material respects, in each case, on and as of the Amendment No. 6 Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct on the basis set forth above as of such earlier date and (ii) no event shall have occurred and be continuing or would result from the consummation of this Agreement that would constitute an Event of Default.
- 5. <u>Use of Proceeds</u>. The Borrower covenants and agrees that it will use the proceeds of the Tranche B-6 Term Loans to prepay in full the aggregate principal amount of Existing Term Loans outstanding on the Amendment No. 6 Effective Date and to pay any interest, fees and/or expenses related thereto.

6. <u>Reaffirmation of the Loan Parties; Reference to and Effect on the Credit Agreement and the other Loan Documents</u>.

- (a) Each Loan Party hereby consents to the amendment of the Credit Agreement effected hereby and confirms and agrees that, notwithstanding the effectiveness of this Agreement, each Loan Document to which such Loan Party is a party is, and the obligations of such Loan Party contained in the Credit Agreement, this Agreement or in any other Loan Document to which it is a party are, and shall continue to be, in full force and effect and are hereby ratified and confirmed in all respects, in each case as amended by this Agreement. For greater certainty and without limiting the foregoing, each Loan Party hereby confirms that the existing security interests granted by such Loan Party in favor of the Senior Credit Parties pursuant to the Loan Documents in the Collateral described therein shall continue to secure the obligations of the Loan Parties under the Credit Agreement, the Credit Agreement and the other Loan Documents as and to the extent provided in the Loan Documents. Except as specifically amended by this Agreement, the Credit Agreement and the other Loan Documents shall remain in full force.
- (b) The execution, delivery and performance of this Agreement shall not constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of any Agent or Lender under, the Credit Agreement or any of the other Loan Documents.

- (c) On and after the Amendment No. 6 Effective Date, each reference in the Credit Agreement to "this Agreement", "hereunder", "hereof", "herein" or words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to the "Credit Agreement", "thereunder", "thereof" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement as amended by this Agreement.
- 7. **Prepayment Notice**. The Participating Lenders and the Fronting Bank party hereto, which constitute the Required Lenders, and the Administrative Agent hereby waive the requirement under Section 2.08(d) of the Credit Agreement to provide notice to the Administrative Agent not less than three (3) Business Days prior to the prepayment of Existing Term Loans to be made hereunder. It is understood and agreed that this Agreement shall serve as the notice referred to in Section 2.08(d) of the Credit Agreement.
- 8. **Request for Borrowing**. Pursuant to this Agreement, the Borrower hereby requests a Borrowing of Tranche B-6 Term Loans, which shall consist of Eurodollar Loans, in an aggregate principal amount of \$896,838,687.59, with such Borrowing to be made on the Amendment No. 6 Effective Date and to have an Interest Period ending on September 30, 2019 (and, notwithstanding anything to the contrary herein, each Participating Lender hereby consents to such non-conforming Interest Period), immediately followed by an Interest Period of one month ending on October 31, 2019. The Administrative Agent, Fronting Bank and each Participating Lender hereby waive (i) the requirement under Section 2.02(a) of the Credit Agreement to provide the Notice of Borrowing not less than three (3) Business Days prior to the proposed Eurodollar Loans not less than three (3) Business Days prior to the proposed conversion or continuation. It is understood and agreed that this Agreement shall serve as the notice referred to in Section 2.06 of the Credit Agreement.
- 9. Notice. For purposes of the Credit Agreement, the initial notice address of each New Lender shall be as separately identified to the Administrative Agent.
- 10. <u>Tax Forms</u>. For each New Lender, delivered herewith to the Administrative Agent are such forms, certificates or other evidence with respect to United States federal income tax withholding matters as such New Lender may be required to deliver to the Administrative Agent pursuant to Section 3.01(f) of the Credit Agreement.
- 11. <u>Recordation of the New Loans</u>. Upon execution and delivery hereof, the Administrative Agent will record the Tranche B-6 Term Loans made by each Participating Lender in the Register.
- 12. <u>Amendment, Modification and Waiver</u>. This Agreement may not be amended, modified or waived except as permitted by Section 10.01 of the Credit Agreement.
- 13. Integration. This Agreement, the other Loan Documents and any separate letter agreements with respect to fees payable to the Lead Arranger and/or the Administrative Agent or the syndication of the Tranche B-6 Term Loans and commitments related thereto constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. This Agreement shall not constitute a novation of any amount owing under the Credit Agreement and all amounts owing in respect of principal, interest, fees and other amounts pursuant to the Credit Agreement and the other Loan Documents shall, to the extent not paid or exchanged on or prior to the Amendment No. 6 Effective Date, continue to be owing under the Credit Agreement or such other Loan Documents until paid in accordance therewith.

- 14. <u>Severability</u>. The provisions of Section 10.12 of the Credit Agreement are hereby incorporated by reference, mutatis mutandis, as if originally made a part hereof.
- 15. <u>GOVERNING LAW; JURISDICTION; SERVICE OF PROCESS; WAIVER OF JURY TRIAL</u>. THE PROVISIONS OF SECTION 10.13 OF THE CREDIT AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE, MUTATIS MUTANDIS, AS IF ORIGINALLY MADE A PART HEREOF.
- 16. <u>**Counterparts**</u>. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page of this Agreement by telecopier shall be effective as delivery of a manually executed counterpart of this Agreement.
- 17. **Loan Document**. On and after the Amendment No. 6 Effective Date, this Agreement shall constitute a "Loan Document" for all purposes of the Credit Agreement and the other Loan Documents (it being understood that for the avoidance of doubt this Agreement may be amended or waived by the parties hereto solely as set forth in Section 12 above).

[Signature Pages Follow]



IN WITNESS WHEREOF, each of the undersigned has caused its duly authorized officer to execute and deliver this Agreement as of the date first set forth above.

MKS INSTRUMENTS, INC.

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

NEWPORT CORPORATION

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

ELECTRO SCIENTIFIC INDUSTRIES, INC.

By:/s/ Seth H. BagshawName:Seth H. BagshawTitle:President and Treasurer

ESI INTERNATIONAL CORPORATION

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

ESI CHINA, INC.

By:/s/ Seth H. BagshawName:Seth H. BagshawTitle:President and Treasurer

ESI LEASING, LLC

By: /s/ Kathleen F. Burke Name: Kathleen F. Burke Title: Manager

[Signature Page to Amendment No. 6 to Term Loan Credit Agreement]

BARCLAYS BANK PLC, as Administrative Agent

By:/s/ Peter C. ThomsonName:Peter C. ThomsonTitle:Managing Director

[Signature Page to Amendment No. 6 to Term Loan Credit Agreement]

BARCLAYS BANK PLC, as Fronting Bank

By:/s/ Peter C. ThomsonName:Peter C. ThomsonTitle:Managing Director

[Signature Page to Amendment No. 6 to Term Loan Credit Agreement]

Form of Tranche B-6 Participation Notice

Date: September [], 2019

Barclays Bank PLC, as Administrative Agent 745 7th Avenue New York NY 10019 Attn: Robert Walsh Phone: (212) 526 6047 Email: <u>robert.xa.walsh@barclays.com</u>

MKS Instruments, Inc. Tranche B-6 Participation Notice

Ladies and Gentlemen:

Reference is made to Amendment No. 6 (the "<u>Amendment</u>") to that certain Term Loan Credit Agreement, dated as of April 29, 2016 (as amended Amendment No. 1 (as defined therein), Amendment No. 2 (as defined therein), Amendment No. 3 (as defined therein), Amendment No. 4 (as defined therein), Amendment No. 5 (as defined therein) and the Amendment, and as may be further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "<u>Credit Agreement</u>"), by and among MKS Instruments, Inc., a Massachusetts corporation (the "<u>Borrower</u>"), the Lenders from time to time party thereto, and Barclays Bank PLC, as administrative agent (in such capacity, the "<u>Administrative Agent</u>"). Unless otherwise specified herein, capitalized terms used but not defined herein are used as defined in the Amendment.

By delivery of this letter agreement (this "<u>Tranche B-6 Participation Notice</u>"), each of the undersigned (each a "<u>Participating Lender</u>"), hereby irrevocably consents to the Amendment and the amendment of the Credit Agreement contemplated thereby and (check as applicable):

- □ <u>*Cashless Settlement Option*</u>. Hereby (i) elects, upon the Amendment No. 6 Effective Date, to exchange the full amount (no partial amounts will be rolled) of the outstanding Existing Tranche B-4 Term Loans of such Participating Lender for an equal outstanding amount of Tranche B-6 Term Loans under the Credit Agreement and (ii) represents and warrants to the Administrative Agent that it has the organizational power and authority to execute, deliver and perform its obligations under this Tranche B-6 Participation Notice and the Amendment (including, without limitation, with respect to any exchange contemplated hereby) and has taken all necessary corporate and other organizational action to authorize the execution, delivery and performance of this Tranche B-6 Participation Notice and the Amendment.
- Cash Settlement Option. Hereby (i) elects to have the full amount of the outstanding Existing Tranche B-4 Term Loans of such Participating Lender repaid or purchased and agrees to promptly (but in any event, on or prior to the date that is 30 days following the

Amendment No. 6 Effective Date) purchase (via assignment and assumption) an equal amount of Tranche B-6 Term Loans and (ii) represents and warrants to the Administrative Agent that it has the organizational power and authority to execute, deliver and perform its obligations under this Tranche B-6 Participation Notice and the Amendment (including, without limitation, with respect to any exchange contemplated hereby) and has taken all necessary corporate and other organizational action to authorize the execution, delivery and performance of this Tranche B-6 Participation Notice and the Amendment.

Notwithstanding anything to the contrary, each undersigned Lender hereby agrees to waive its right to compensation for any amounts owing under Sections 3.02 or 3.03 of the Credit Agreement.

AMOUNT OF EXISTING TRANCHE B-5 TERM LOANS OF SUCH PARTICIPATING LENDER: \$

- Cashless Settlement Option. Hereby (i) elects, upon the Amendment No. 6 Effective Date, to exchange the full amount (no partial amounts will be rolled) of the outstanding Existing Tranche B-5 Term Loans of such Participating Lender for an equal outstanding amount of Tranche B-6 Term Loans under the Credit Agreement and (ii) represents and warrants to the Administrative Agent that it has the organizational power and authority to execute, deliver and perform its obligations under this Tranche B-6 Participation Notice and the Amendment (including, without limitation, with respect to any exchange contemplated hereby) and has taken all necessary corporate and other organizational action to authorize the execution, delivery and performance of this Tranche B-6 Participation Notice and the Amendment.
- Cash Settlement Option. Hereby (i) elects to have the full amount of the outstanding Existing Tranche B-5 Term Loans of such Participating Lender repaid or purchased and agrees to promptly (but in any event, on or prior to the date that is 30 days following the Amendment No. 6 Effective Date) purchase (via assignment and assumption) an equal amount of Tranche B-6 Term Loans and (ii) represents and warrants to the Administrative Agent that it has the organizational power and authority to execute, deliver and perform its obligations under this Tranche B-6 Participation Notice and the Amendment (including, without limitation, with respect to any exchange contemplated hereby) and has taken all necessary corporate and other organizational action to authorize the execution, delivery and performance of this Tranche B-6 Participation Notice and the Amendment.

Notwithstanding anything to the contrary, each undersigned Lender hereby agrees to waive its right to compensation for any amounts owing under Sections 3.02 or 3.03 of the Credit Agreement.

Please note that, regardless of whether you elect the Cashless Settlement Option or the Cash Settlement Option, the Lead Arranger may, in its sole discretion, (i) in the case of the Cashless Settlement Option, elect to exchange (on a cashless basis) less than 100% of your existing hold, in which case the difference between the current amount and the allocated amount will be prepaid to each of your funds on the Amendment No. 6 Effective Date on a pro rata basis and/or (ii) in the case of the Cash Settlement Option, allocate to you less than 100% of your existing hold, in which case your allocated amount will be allocated to each of your funds on a pro rata basis.

[Signature Page Follows]

Very truly yours,

By:

Name: Title:

By: Name: Title:

REALLOCATED LOANS

Barclays Bank PLC

\$170,494,658.26

MKS Instruments Completes Fifth Repricing and Makes a Voluntary \$50 Million Prepayment on its Secured Term Loan

Cumulative Actions since Origination Have Resulted in Total Voluntary Prepayments of \$525 Million

ANDOVER, Mass., October 1, 2019 (GLOBE NEWSWIRE) — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that enable advanced processes and improve productivity, announced today that it successfully completed the repricing of its existing secured term loan. The lenders have agreed to an amendment that results in a reduction of the interest rate spread on the two existing tranches of the secured term loan from LIBOR plus 2.00% and LIBOR plus 2.25%, respectively, to LIBOR plus 1.75%. This transaction also combined the two existing tranches into one tranche with a maturity date in February 2026. Based upon the current interest rate, the annualized non-GAAP interest savings from this repricing is approximately \$4 million.

In addition, the Company announced that it has made a voluntary \$50 million prepayment of principal on its secured term loan, reducing the outstanding principal to approximately \$897 million as of September 27, 2019, from approximately \$947 million at June 30, 2019. Based upon the current interest rate, this voluntary prepayment results in an additional annualized non-GAAP interest savings of approximately \$1.9 million.

"We continue to deliver on our commitment to reduce our leverage and interest costs. This marks the fifth repricing and tenth voluntary prepayment since loan origination in April 2016. These actions demonstrate our consistent execution in reducing our leverage as well as reducing our annualized non-GAAP interest rate costs by almost \$6 million, based upon the current interest rate," said Seth H. Bagshaw, Senior Vice President and Chief Financial Officer.

Barclays acted as sole arranger for this secured term loan repricing and amendment.

About MKS Instruments

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes to improve process performance and productivity for our customers. Our products are derived from our core competencies in pressure measurement and control, flow measurement and control, gas and vapor delivery, gas composition analysis, residual gas analysis, leak detection, control technology, ozone generation and delivery, power, reactive gas generation, vacuum technology, lasers, photonics, sub-micron positioning, vibration control, optics and laser-based manufacturing solutions. We also provide services relating to the maintenance and repair of our products, installation services and training. Our primary served markets include semiconductor, industrial technologies, life and health sciences, and research and defense. Additional information can be found at www.mksinst.com.

Use of Non-GAAP Financial Measure

Non-GAAP interest expense excludes amortization of debt issuance costs. This non-GAAP measure is not in accordance with U.S. Generally Accepted Accounting Principles (GAAP). MKS management believes the presentation of this non-GAAP financial measure is useful to investors for comparing prior periods and analyzing ongoing business trends and financial results. On an annualized basis, GAAP interest savings, at the current interest rate, is approximately \$7 million, which includes approximately \$1 million of amortization of deferred financing costs.

Forward-Looking Statements

This release contains a forward-looking statement within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27 of the Securities Act, and Section 21E of the Securities Exchange Act regarding MKS' interest expense. This statement is only a prediction. Actual events or results may differ materially from those in the forward-looking statement set forth herein. Readers are referred to MKS' filings with the Securities and Exchange Commission, including its most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q for a discussion of these and other important risk factors concerning MKS and its operations. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements, whether as a result of new information, future events or otherwise.

Company Contact:

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Investor Relations Contacts:

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