FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to |
|--|
| Section 16. Form 4 or Form 5 |
| obligations may continue. See |
| Instruction 1(b). |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | | | | | | | | | |
|--------------------------|-----|--|--|--|--|--|--|--|--|
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| Estimated average burden | | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | |

| BAGSHAW | d Address of Reporting Person* <u>IAW SETH H</u> (First) (Middle) DRIVE, SUITE 201 | | 2. Issuer Name and Ticker or Trading Symbol <u>MKS INSTRUMENTS INC</u> [MKSI] 3. Date of Earliest Transaction (Month/Day/Year) 02/25/2016 | | tionship of Reporting Per all applicable) Director Officer (give title below) Vice President, CF | 10% Owner Other (specify below) |
|-------------------------------|---|----------------|--|------------------------|---|---------------------------------------|
| (Street) ANDOVER (City) | MA (State) | 01810 (Zip) | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) X | ridual or Joint/Group Filing Form filed by One Rep Form filed by More tha | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | | | 4. Securities A Disposed Of (D | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---------------------------------|--|---|-------------------------|---|-----------------------------------|---------------|---------|---|---|---|--|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (1150. 4) | |
| Common Stock | 02/25/2016 | | М | | 5,052.136 | A | (1) | 44,844.793 | D | | |
| Common Stock | 02/25/2016 | | М | | 3,715.131 | A | (1) | 48,559.924 | D | | |
| Common Stock | 02/25/2016 | | F ⁽²⁾ | | 2,846 | D | \$32.77 | 45,713.924 | D | | |
| Common Stock | 02/26/2016 | | S ⁽²⁾ | | 1,750 | D | \$32.7 | 43,963.924 | D | | |

| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | |
|--|--|------------|--|------|---|-----|-----------|--|--------------------|--|----------------------------------|---|--|--|--|
| 1. Title of Derivative Security (Instr. 3) | erivative Conversion Date Exer ecurity or Exercise (Month/Day/Year) if an | | 3A. Deemed 4. Execution Date, if any (Month/Day/Year) 8) | | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | derivative Securities Beneficially Owned Following Reported | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | Transaction(s) (Instr. 4) | | |
| Restricted Stock Unit | (1) | 02/25/2016 | | м | | | 5,052.136 | (3) | (3) | Common Stock | 5,052.136 | (1) | 40,856.33 | D | |
| Restricted Stock Unit | (1) | 02/25/2016 | | М | | | 3,715.131 | (4) | (4) | Common | 3,715.131 | (1) | 25,416.798 | D | |

Explanation of Responses:

1. Each restricted stock unit represents the contingent right to receive one share of common stock of MKS Instruments, Inc.

2. This transaction was effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.

3. These RSUs are subject to the achievement of performance criteria determined in the first year of grant and thereafter vest in three equal annual installments commencing on the first anniversary of the grant date.

4. These RSUs vest in three equal annual installments commencing on the first anniversary of the grant date.

Remarks:

Exhibit List: Exhibit 24 - Power of Attorney

/s/ M. Kathryn Rickards,

attorney-in-fact

02/29/2016

Date

** Signature of Reporting Person

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

LIMITED POWER OF ATTORNEY FOR SECTION 16 REPORTING OBLIGATIONS

Know all by these present that the undersigned hereby constitutes and appoints each of Kathleen F. Burke, Renee M. Donlan and M. Kathryn Rickards, signing singly, the undersigned's true and lawful attorney-in-fact to:

1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of MKS Instruments, Inc. (the "Company"), Forms 3, 4, 5 and 144 (collectively, the ?Forms?) in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;

2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Forms, complete and execute any amendment or amendments thereto, and timely file such Forms with the United States Securities and Exchange Commission and any stock exchange or similar authority; and

3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Limited Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Limited Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Limited Power of Attorney shall supersede any power of attorney previously granted by the undersigned with respect to the subject matter herein and shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, 5 and 144 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. This Limited Power of Attorney may be filed with the SEC as a confirming statement of the authority granted herein.

IN WITNESS WHEREOF, the undersigned has caused this Limited Power of Attorney to be executed as of this 29th day of January 2016.

/s/ Seth H. Bagshaw

Seth H. Bagshaw