

SMITH JOHN ALEXANDER
 Form 4
 February 22, 2011

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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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 OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 SMITH JOHN ALEXANDER

(Last) (First) (Middle)

2 TECH DRIVE

(Street)

ANDOVER, MA 01810

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol

MKS INSTRUMENTS INC [MKSI]

3. Date of Earliest Transaction (Month/Day/Year)

02/17/2011

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)

Group VP, ASG

6. Individual or Joint/Group Filing(Check Applicable Line)

Form filed by One Reporting Person
 Form filed by More than One Reporting Person

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) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Ownership (Instr. 4) | | | |
|---------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------|--------|---|--|
| | | | | (A) or (D) | Price | | | | | |
| Common Stock | 02/17/2011 | | M | V | 24,000 | A | \$ 27.11 | 24,000 | D | |
| Common Stock | 02/17/2011 | | S | | 24,000 | D | \$ 30.45 | 0 | D | |

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

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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) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) |
|--------------------------------------------|--------------------------------------------------------|--------------------------------------|----------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------|
| | | | | Code | V (A) (D) | Date Exercisable Expiration Date | Title Amount or Number of Shares |
| Restricted Stock Unit | (1) | 02/17/2011 | | J(2) | 83 | (3) (3) | Common Stock 0 |
| Stock Option (Right to Buy) | \$ 27.11 | 02/17/2011 | | M | 24,000 | 11/11/2004 11/13/2013 | Common Stock 24,000 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|-----------------------------------------------------------|---------------|-----------|---------------|-------|
| | Director | 10% Owner | Officer | Other |
| SMITH JOHN ALEXANDER 2 TECH DRIVE ANDOVER, MA 01810 | | | Group VP, ASG | |

Signatures

/s/Renee M. Donlan POA 02/22/2011

**Signature of Reporting Person Date

Explanation of Responses:

- * 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).
- (1) Each restricted stock unit represents the contingent right to receive one share of common stock of MKS Instruments, Inc.
- (2) This transaction reflects the forfeiture of RSUs due to performance criteria.
- (3) These RSUs are subject to the achievement of performance criteria determined in the first year of the grant and thereafter vests in equal annual installments over three years.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.