

Loomis Paul  
Form 4  
March 30, 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 \*  
Loomis Paul

(Last) (First) (Middle)

C/O 2 TECH DRIVE, SUITE 201

(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)

03/28/2011

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)

VP & GM, Astex

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 Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
|                                 |                                      |  | Code                           | V Amount (A) or (D) Price   |   |  |   |
| Common Stock                    | 03/28/2011                           |  | M                              | 4,225 A (1)   | 4,225   | D  |   |
| Common Stock                    | 03/28/2011                           |  | F(2)                           | 1,342 D \$ 32.32  | 2,883   | D  |   |
| Common Stock                    | 03/29/2011                           |  | S(2)                           | 2,883 D 31.737 (3)  | 0   | D  |   |

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

**Persons who respond to the collection of information contained in this form are not required to respond unless the form**

SEC 1474 (9-02)

displays a currently valid OMB control number.

**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) | 8. Pr Deriv Secur (Instr. 3 and 4) |                            |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|------------------------------------|----------------------------|
|  |  |                                      |  | Code                           | V (A) (D)   | Date Exercisable   | Expiration Date   | Title                              | Amount or Number of Shares |
| Restricted Stock Unit                      | (1)  | 03/28/2011                           |  | M                              | 4,225   | (4)  | (4)   | Common Stock                       | 4,225                      |

## Reporting Owners

| Reporting Owner Name / Address                                  | Relationships |           |                |       |
|---|---------------|-----------|----------------|-------|
|   | Director      | 10% Owner | Officer        | Other |
| Loomis Paul<br>C/O 2 TECH DRIVE, SUITE 201<br>ANDOVER, MA 01810 |               |           | VP & GM, Astex |       |

## Signatures

/s/Renee M. Donlan POA 03/30/2011

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 was effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.  
This transaction was executed in multiple trades at prices ranging from \$31.59 to \$31.96 The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide, upon request, the full information regarding the number of shares and prices at which the transaction was effected.
- (4) The RSUs fully vest three years from grant date.

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.