П

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 | | | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | | |
| Estimated average burden | | | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | | |

| | | | 2. Issuer Name and Ticker or Trading Symbol <u>MKS INSTRUMENTS INC</u> [MKSI] | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | |
|------------|---------|-------|---|----------|--|-----------------------|--|--|--|
| _ | | | | | | | | | |
| (Last) | | | 3. Date of Earliest Transaction (Month/Day/Year) 10/15/2009 | | Officer (give title below) | Other (specify below) | | | |
| 2 TECH DRI | VE | | | | | | | | |
| , | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv | 6. Individual or Joint/Group Filing (Check Applicable | | | | |
| (Street) | | | | Line) | | | | | |
| ANDOVER | MA | 01810 | | X | Form filed by One Re | eporting Person | | | |
| | | 01010 | | | Form filed by More th Person | an One Reporting | | | |
| (City) | (State) | (Zip) | | | | | | | |

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 Disposed Of | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership |
|---------------------------------|--|---|-------------------------|---|------------------------------|---------------|------------------------|---|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (Instr. 4) |
| Common Stock | 10/16/2009 | | S ⁽¹⁾ | | 25,000 | D | \$19.03 ⁽²⁾ | 812,257 | D | |
| Common Stock | 10/15/2009 | | S ⁽¹⁾ | | 25,540 | D | \$19.51 ⁽³⁾ | 1,699,221 | Ι | By Spouse |

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. Transa Code (8) | | 5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instr and 5 | ative rities ired osed | Expiration Date (Month/Day/Year) d d | | Expiration Date | | n Date Amount of | | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Securities Beneficially Owned Following Reported Transaction(s) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Ownership Form: Direct (D) or Indirect | Ownership Form: Direct (D) or Indirect | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|---|--|---|------------------------------|---|--|---------------------------------|---|--------------------|-----------------|--|------------------|--|--|--|--|--|---|---|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | | | | | | |

Explanation of Responses:

1. Transaction effected pursuant to a Rule 10b5-1 trading plan.

2. This transaction was executed in multiple trades at prices ranging from \$18.80 to \$19.36. 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.

3. This transaction was executed in multiple trades at prices ranging from \$19.33 to \$20.13. 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.

/s/Renee M. Donlan POA 10/19/2009

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.