FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

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

| 1. Name and Address of Reporting Person* HANLEY PETER | | | | | 2. Issuer Name and Ticker or Trading Symbol MKS INSTRUMENTS INC [MKSI] | | | | | | | | | | ip of Reporting Person(s) to Issuer plicable) ctor 10% Owner | | | | |
|--|--|--|------------------------|---|--|---|-------|--|--|---------|---|---|---|---|---|---|---|--|----|
| (Last) (First) (Middle) 2 TECH DRIVE | | | | 3. Date of Earliest Transaction (Month/Day/Year) 08/21/2012 | | | | | | | | | Office | er (give title w) | | Other (elow) | specify | | |
| (Street) ANDOV | | | 01810 Zip) | | 4. If | Amen | dment | , Date (| of Origin | al File | ed (Month/Da | y/Year) | | 6. Indiv Line) X | Form | r Joint/Group n filed by One n filed by Mor on | e Reportino | , Pers | on |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/ | | | | Execution Date, | | 3. Transaction Code (Instr. 8) 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 1) | | | | | ities icially d Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | | | | | |
| | | | | | | Code | v | Amount | (A) or (D) | Price | | Transa | action(s) 3 and 4) | | | (Instr. 4) | | | |
| Common Stock 08/21/20 | | | 012 | 12 | | S | | 4,000 | D | \$27.0 |)68 ⁽¹⁾ | | 20,222 | 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) 2. Conversion or Exercise Price of Derivative Security 3. Transaction Date (Month/Day/Yea | | | Execution Date, if any | | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | rative rities ired r osed) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | 8. Price of Derivative Security (Instr. 5) | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Owner Form: Direct or Ind (I) (Ins | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | (D) | Date Exercis | sable | Expiration Date | Title | Amount or Number of Shares | | | | | | |

Explanation of Responses:

1. This transaction was executed in multiple trades at prices ranging from \$27.067 to \$27.08 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 08/22/2012

** Signature of Reporting Person Date

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.