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# FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| oblig | ion 16. Form 4 or Form 5<br>Jations may continue. See<br>Juction 1(b). |
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|-------|--|

## 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       |  |  |  |  |  |  |  |  |  |

| 1. Name and Address of Reporting Person*<br>BERTUCCI CLAIRE R                    |  |  | 2. Issuer Name <b>and</b> Ticker or Trading Symbol <u>MKS INSTRUMENTS INC</u> [ MKSI ] | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>Director 10% Owner  |  |  |  |  |  |  |
|--|--|--|--|---|--|--|--|--|--|--|
| (Last)<br>90 INDUSTRIA   | INDUSTRIAL WAY<br>eet)<br>ILMINGTON MA 01887 |  | 3. Date of Earliest Transaction (Month/Day/Year)<br>10/22/2007                         | Officer (give title X Other (specify below)<br>Spouse of Chairman   |  |  |  |  |  |  |
| (Street)<br>WILMINGTON<br>(City)   |  |  | 4. If Amendment, Date of Original Filed (Month/Day/Year)                               | <ul> <li>6. Individual or Joint/Group Filing (Check Applicable Line)</li> <li>X Form filed by One Reporting Person</li> <li>Form filed by More than One Reporting Person</li> </ul> |  |  |  |  |  |  |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |  |  |  |   |  |  |  |  |  |  |

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

|                                 |  | ,   | · · · · · · |   |           |               |         |   |   |   |
|---------------------------------|--|---|-------------|---|-----------|---------------|---------|---|---|---|
| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) |             |   |           |               |         | 5. Amount of<br>Securities<br>Beneficially<br>Owned Following<br>Reported | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|                                 |  |   | Code        | v | Amount    | (A) or<br>(D) | Price   | Transaction(s)<br>(Instr. 3 and 4)  |   | (1130.4)  |
| Common                          | 10/22/2007                                 |   | S           |   | 25,000(1) | D             | \$19.47 | 2,286,580   |   | By<br>Spouse  |
| Common                          |  |   |             |   |           |               |         | 2,470,661   | D   |   |

### Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

|   |   |  |   |                              |   |  |  |                     |                    |                        | -                                      |   |  |  |
|---|---|--|---|------------------------------|---|--|--|---------------------|--------------------|------------------------|--|---|--|--|
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transa<br>Code (<br>8) |   | of<br>Deriv<br>Secu<br>Acqu<br>(A) or<br>Dispo<br>of (D)<br>(Instr | 5. Number<br>of Expiration Date<br>Derivative<br>Securities<br>Acquired<br>(A) or Disposed<br>of (D)<br>(Instr. 3, 4<br>and 5) |                     | ate                | Amount of Securities S |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|   |   |  |   | Code                         | v | (A)  | (D)  | Date<br>Exercisable | Expiration<br>Date | Title                  | Amount<br>or<br>Number<br>of<br>Shares |   |  |  |

Explanation of Responses:

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

#### By: Joseph M.Tocci / POA

10/23/2007 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.