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).

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| 1. Name and Address of Reporting Person*  BERTUCCI CLAIRE R  (Last) (First) (Middle)  90 INDUSTRIAL WAY |  |  |   |                             | 3. D                             | Issuer Name and Ticker or Trading Symbol MKS INSTRUMENTS INC [ MKSI ]      Date of Earliest Transaction (Month/Day/Year) 10/10/2007 |                       |                                  |                                    |  |                    |   |                                       |                      |  | all app   | olicable)<br>etor<br>er (give title  | g Person(s) to Is  10% C  X Other below                           |  | Owner<br>(specify  |
|---|--|--|---|-----------------------------|----------------------------------|---|-----------------------|----------------------------------|------------------------------------|--|--------------------|---|---------------------------------------|----------------------|--|---|--|---|--|--|
|   |  |  |   |                             | 10/                              |   |                       |                                  |                                    |  |                    |   |                                       |                      | Spouse of Chairman   |   |  |   |  |  |
|   | Street) WILMINGTON MA 01887  |  |   |                             |                                  | 4. If Amendment, Date of Original Filed (Month/Day/Year)  |                       |                                  |                                    |  |                    |   |                                       |                      | Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person |   |  |   |  |  |
| (City)  | (S   |  | Zip)  | n-Deriv                     | vative                           | Se  | curitie               | e Arr                            | nuired                             | Dis  | nosed o            | ıf oı   | r Ren                                 | efici                | ally C   | )wne  | 2d   |   |  |  |
| Table I - Non-Deriva  1. Title of Security (Instr. 3)  2. Transac Date (Month/Da                        |  |  |   | action                      | ction 2A. Deemed Execution Date, |   | 3. 4<br>Transaction D |                                  | 4. Securit                         | Securities Acquired (A) sposed Of (D) (Instr. 3, |                    |   | or 5. An<br>4 and Secu<br>Bene<br>Own |                      | ount of<br>ties<br>cially<br>d Following   | 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) |  |  |
|   |  |  |   |                             |                                  |   |                       |                                  |                                    | v  | Amount             |   | (A) or<br>(D)                         | Price                | . 1  | Reported<br>Transaction(s)<br>(Instr. 3 and 4)                    |  |   |  | (111501. 4)  |
| Common 10/10  |  |  |   |                             | /2007                            | 2007  |                       | S <sup>(1)</sup>                 |                                    | 50,000   | )                  | D   | \$20                                  | 0.26                 |  | 196,784   | Γ  |   |  |  |
| Common  |  |  |   |                             |                                  |   |                       |                                  |                                    |  |                    |   |                                       |                      | 2,361,580  |   | I  |   | By<br>Spouse                                 |  |
|   | 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 E<br>if any<br>(Month/Day | Date, Transact<br>Code (Ins |                                  |   | of                    | rities<br>ired<br>r<br>osed<br>) | 6. Date E<br>Expiratio<br>(Month/D | n Dat  |                    | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr.<br>and 4) |                                       |                      |  | ivative<br>curity   | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(<br>(Instr. 4) | Owr<br>Forr<br>Dire<br>or Ir<br>(I) (I                            | ership<br>n:<br>ct (D)<br>direct<br>nstr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|   |  |  |   |                             | Code                             | v   | (A)                   | (D)                              | Date<br>Exercisa                   |  | Expiration<br>Date | Title   | or<br>Nu<br>of                        | ount<br>mber<br>ares |  |   |  |   |  |  |

## **Explanation of Responses:**

1. The transactions reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan previously adopted by the reporting person.

By: Joseph M.Tocci / POA 10/10/2007

\*\* 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.