FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB AP      | PROVAL   |
|-------------|----------|
| OMB Number: | 3235-028 |

37 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

|   |   |  |                  |   | Of S  | Secuo   | iii 30(ii) | or the r        | nvesume  | iil Coi         | прапу Аст           | 01 194  | U                        |        |   |                                    |   |   |  |  |  |
|---|---|--|------------------|---|---|---|------------|-----------------|--|-----------------|---------------------|---|--------------------------|--------|---|------------------------------------|---|---|--|--|--|
| 1. Name and Address of Reporting Person* <u>BERTUCCI CLAIRE R</u> |   |  |                  |   |   | 2. Issuer Name and Ticker or Trading Symbol  MKS INSTRUMENTS INC [ MKSI ] |            |                 |  |                 |                     |   |                          |        | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director X 10% Owner |                                    |   |   |  |  |  |
| (Last) (First) (Middle) 90 INDUSTRIAL WAY                         |   |  |                  |   | 3. Date of Earliest Transaction (Month/Day/Year) 07/19/2006 |   |            |                 |  |                 |                     |   |                          |        | Office<br>below   | er (give title<br>v)               |   | Other (below)   | (specify   |  |  |
| (Street) WILMIN (City)  | INGTON MA 01887 (State) (Zip)   |  |                  |   |   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                  |            |                 |  |                 |                     |   |                          |        | Indiv<br>ne)<br>X   | ′                                  |   |   |  |  |  |
|   |   | Tab  | le I - No        | n-Deriv   | ative   | Sec   | curitie    | s Acc           | quired,  | Dis             | posed o             | f, or   | Ben                      | eficia | ally (  | Owne                               | ed  |   |  |  |  |
| 1. Title of Security (Instr. 3)  2. Transac Date (Month/Da        |   |  |                  | Execut<br>y/Year) if any                                    |   | Deemed<br>ecution Date,<br>ny<br>onth/Day/Year)                           |            | ction<br>Instr. | 4. Securities Acquired (A)<br>Disposed Of (D) (Instr. 3, 4 |                 |                     |   | 4 and 5) See<br>Be<br>Ow |        | i. Amount of<br>Securities<br>Beneficially<br>Dwned Following<br>Reported                     |                                    | wnership<br>m: Direct<br>or Indirect<br>nstr. 4)  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |  |
|   |   |  |                  |   |   |   |            |                 | Code   | v               | Amount              | (1  | A) or<br>O)              | Price  |   | Transaction(s)<br>(Instr. 3 and 4) |   |   |  | (11301. 4)   |  |
| Common  |   |  |                  | 07/19   | /2006   |   |            |                 | S  |                 | 100,00              | 0   | D                        | \$18   | .98   | 3,9                                | 946,784   | 4 D   |  |  |  |
| Common  |   |  |                  |   |   |   |            |                 |  |                 |                     |   |                          |        | 3,911,580   |                                    |   | I   | By<br>Spouse   |  |  |
|   |   | Ta   |                  |   |   |   |            |                 |  |                 | sed of,<br>onvertib |   |                          |        | y Ov  | vned                               |   |   |  |  |  |
| 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) | Execution if any | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) |   | 4.<br>Transaction<br>Code (Instr.<br>8)                                   |            | of              |  | exercision Date |                     | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr.<br>and 4) |                          |        |   | vative<br>urity<br>r. 5)           | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s<br>(Instr. 4) | F<br>I  | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 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                       | nber   |   |                                    |   |   |  |  |  |

**Explanation of Responses:** 

By: Joseph M.Tocci / POA 07/20/2006

\*\* Signature of Reporting Person

Date

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

Code V

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.

(A) (D)

 $<sup>^{\</sup>star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).