

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

SCHEDULE 13G

(AMENDMENT NO. 8)

MKS Instruments, Inc  
(Name of Issuer)

Common Stock  
(Title of Class of Securities)

55306N 10 4  
(CUSIP Number)

December 31, 2006  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

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 1 NAMES OF REPORTING PERSONS.  
 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

John R. Bertucci  
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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) [ ]  
 (b) [ ]

Not Applicable  
 -----

3 SEC USE ONLY  
 -----

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States  
 -----

5 SOLE VOTING POWER

3,177,882  
 -----

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

6 SHARED VOTING POWER

3,446,784 (1)  
 -----

7 SOLE DISPOSITIVE POWER

3,177,882  
 -----

8 SHARED DISPOSITIVE POWER

3,446,784 (1)  
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9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,624,666 (1)  
 -----

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

Not Applicable  
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11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

11.7%  
 -----

12 TYPE OF REPORTING PERSON\*

IN  
 -----

\* See Instructions before filling out

(1) Shares reported in Rows 6, 8 and 9 include 3,446,784 shares beneficially owned by Claire R. Bertucci, Mr. Bertucci's spouse, with respect to which Mr. Bertucci disclaims beneficial ownership.

Item 1(a). Name of Issuer:

MKS Instruments, Inc.

Item 1(b). Address of Issuer's Principal Executive Offices:

90 Industrial Way

Wilmington, MA 01887

Item 2(a). Name of Person Filing:

John R. Bertucci

Item 2(b). Address of Principal Business Office or, if None, Residence:

The address of the reporting persons is:

c/o MKS Instruments, Inc.

90 Industrial Way

Wilmington, MA 01887

Item 2(c). Citizenship:

Mr. Bertucci is a citizen of the United States.

Item 2(d). Title of Class of Securities:

Common Stock, no par value per share.

Item 2(e). CUSIP Number:

CUSIP No. 55306N 10 4

Item 3. If This Statement is Filed Pursuant to Section 240.13d-1(b), or 240.13d-2(b) or (c), Check Whether the Person Filing is a: Not Applicable.

- (a)  Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o).
- (b)  Bank as defined in Section 3(a)(6) of the Exchange Act (15 U.S.C. 78c).
- (c)  Insurance company as defined in Section 3(a)(19) of the Exchange Act (15 U.S.C. 78c).
- (d)  Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

- (e)  An investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with Section 240.13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with Section 240.13d -1(b)(1)(ii)(G);
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j)  Group, in accordance with Section 240.13d-1(b)(1)(ii)(J).

Item 4. Ownership:

The filing of this statement shall not be construed as an admission that the reporting person is, for any purpose other than Section 13(d) or 13(g) of the Act, the beneficial owner of any securities covered under this Statement.

- (a) Amount Beneficially Owned by John R. Bertucci: 6,374,666 shares(2) (3)
- (b) Percent of Class: 11.7%
- (c) Number of Shares as to which John R. Bertucci has:
  - (i) Sole power to vote or to direct the vote: 3,177,882 shares(2)
  - (ii) Shared power to vote or to direct the vote: 3,446,784 shares(3)
  - (iii) Sole power to dispose or to direct the disposition of:  
3,177,882(2) shares
  - (iv) Shared power to dispose or to direct the disposition of:  
3,446,784 shares(3)

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than 5% of the class of securities, check the following: .

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- (2) Includes, pursuant to Rule 13d-3, 16,302 shares subject to options exercisable within 60 days of December 31, 2006.
- (3) Includes 3,446,784 shares beneficially owned by Claire R. Bertucci, Mr. Bertucci's spouse, with respect to which Mr. Bertucci disclaims beneficial ownership.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of Group.

Not applicable

Item 10. Certification.

Not applicable

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 7, 2007

/s/ John R. Bertucci

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John R. Bertucci