

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13G
(RULE 13D-102)

INFORMATION TO BE INCLUDED IN STATEMENTS
FILED PURSUANT TO RULES 13D-1(B)(C), AND (D)
AND AMENDMENTS THERETO FILED
PURSUANT TO RULE 13D-(2)(B)

(AMENDMENT NO. 5)

MKS Instruments, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

55306N 10 4

(CUSIP Number)

December 31, 2004

(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)

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

John R. Bertucci

 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

NUMBER OF
 SHARES 0

 BENEFICIALLY 6 SHARED VOTING POWER
 OWNED BY

EACH REPORTING 5,011,216(1)
 PERSON

 WITH 7 SOLE DISPOSITIVE POWER

5,011,216(1)

 8 SHARED DISPOSITIVE POWER

0

 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,558,000(1)

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

Not Applicable

 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

17.8%(1)

 12 TYPE OF REPORTING PERSON*

IN

 * See Instructions before filling out

 (1) CONSISTS OF SHARES BENEFICIALLY OWNED AS OF JANUARY 31, 2005. INCLUDES,
 PURSUANT TO RULE 13D-3, 30,106 SHARES SUBJECT TO OPTIONS EXERCISABLE WITHIN 60
 DAYS OF JANUARY 31, 2005. SHARES REPORTED IN ROW 9 INCLUDE, 4,546,784 SHARES
 BENEFICIALLY OWNED BY CLAIRE R. BERTUCCI, MR. BERTUCCI'S SPOUSE, AS OF JANUARY
 31, 2005 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 Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a: Not Applicable.

(a) Broker or dealer registered under Section 15 of the Exchange Act.

(b) Bank as defined in Section 3(a)(6) of the Exchange Act.

(c) Insurance company as defined in Section 3(a)(19) of the Exchange Act.

(d) Investment company registered under Section 8 of the Investment Company Act.

- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) Group, in accordance with Rule 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: 9,558,000 shares(2)
- (b) Percent of Class: 17.8%(2)
- (c) Number of Shares as to which John R. Bertucci has:
 - (i) Sole power to vote or to direct the vote: 0 shares
 - (ii) Shared power to vote or to direct the vote: 5,011,216 shares(2)
 - (iii) Sole power to dispose or to direct the disposition of: 5,011,216(2) shares
 - (iv) Shared power to dispose or to direct the disposition of: 0 shares

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: .

 (2) CONSISTS OF SHARES BENEFICIALLY OWNED AS OF JANUARY 31, 2005. INCLUDES, PURSUANT TO RULE 13D-3, 30,106 SHARES SUBJECT TO OPTIONS EXERCISABLE WITHIN 60 DAYS OF JANUARY 31, 2005. SHARES REPORTED IN ROW 4(a) ALSO INCLUDE 4,546,784 SHARES BENEFICIALLY OWNED BY CLAIRE R. BERTUCCI, MR. BERTUCCI'S SPOUSE, AS OF JANUARY 31, 2005 WITH RESPECT TO WHICH MR. BERTUCCI DISCLAIMS BENEFICIAL OWNERSHIP.

- Item 6. Ownership of More than Five Percent on Behalf of Another Person.
- 450,000 shares reported by Mr. Bertucci are held by Robinson Hill LP ("Robinson"). Certain limited partners, along with the general partner, of which Mr. Bertucci is the managing member, of Robinson, have the right to receive dividends from, or the proceeds from the sale of such securities.
- 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

SIGNATURES

After reasonable inquiry and to the best of the knowledge and belief of each of the undersigned, each of the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

Dated: February 15, 2005

/s/ John R. Bertucci

John R. Bertucci