

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM S-8

**REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933**

MKS Instruments, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Massachusetts
(State or Other Jurisdiction of Incorporation
or Organization)

04-2277512
(I.R.S. Employer
Identification No.)

**2 Tech Drive, Suite 201,
Andover, Massachusetts**
(Address of Principal Executive Offices)

01810
(Zip Code)

**Fourth Amended and Restated 1999 Employee Stock Purchase Plan
Third Amended and Restated International Employee Stock Purchase Plan**
(Full Title of the Plan)

Ronald C Weigner
Vice President, Chief Financial Officer and Treasurer
MKS Instruments, Inc.
2 Tech Drive, Suite 201,
Andover, Massachusetts 01810
(Name and Address of Agent For Service)

(978) 645-5500
(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer
(Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, no par value per share	850,000 shares (2)	\$19.41(3)	\$16,498,500(3)	\$920.62

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of (i) 700,000 shares issuable under the Fourth Amended and Restated 1999 Employee Stock Purchase Plan and (ii) 150,000 shares issuable under the Third Amended and Restated International Employee Stock Purchase Plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Market on August 5, 2009.

TABLE OF CONTENTS

PART I

Item 1. Plan Information

Item 2. Registrant Information and Employee Plan Annual Information

PART II

Item 3. Incorporation of Documents by Reference

Item 4. Description of Securities

Item 5. Interests of Named Experts and Counsel

Item 6. Indemnification of Directors and Officers

Item 7. Exemption from Registration Claimed

Item 8. Exhibits

Item 9. Undertakings

SIGNATURES

INDEX TO EXHIBITS

Ex-5.1 Opinion of Wilmer Cutler Pickering Hale and Dorr LLP

Ex-23.2 Consent of PricewaterhouseCoopers LLP

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

The information required by Item 1 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

Item 2. Registrant Information and Employee Plan Annual Information.

The written statement required by Item 2 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The registrant is subject to the informational and reporting requirements of Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

(a) The registrant's latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the registrant's latest fiscal year for which such statements have been filed.

(b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.

(c) The description of the securities contained in the registrant's registration statement on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Table of Contents

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Wilmer Cutler Pickering Hale and Dorr LLP (“WilmerHale”) has opined as to the legality of the securities being offered by this registration statement.

Item 6. Indemnification of Directors and Officers.

Section 8.51(a) of Chapter 156D of the Massachusetts General Laws provides that a corporation may indemnify (A) a director who is a party to a proceeding if (i) he conducted himself in good faith, (ii) he reasonably believed that his conduct was in the best interests of the corporation or that his conduct was at least not opposed to the best interests of the corporation and (iii) he had no reasonable cause to believe his conduct was unlawful or (B) a director who is a party to a proceeding if he engaged in conduct for which he shall not be liable under a provision of the Articles of Organization (defined below).

Section 8.52 of Chapter 156D provides that a corporation must indemnify a director who is wholly successful, on the merits or otherwise, in the defense of any proceeding to which the director was a party because he was a director of the corporation against reasonable expenses incurred by him in connection with the proceeding.

Section 8.56(a) of Chapter 156D provides that a corporation may indemnify its officers to the same extent as its directors and, for officers that are not directors, to the extent provided by (i) the Articles of Organization, (ii) the bylaws, (iii) resolutions of the board of directors or (iv) a contract. In all instances, the extent to which a corporation provides indemnification to its officers under Section 8.56(a) is optional. Section 8.56(c) provides that an officer of a corporation who is not a director is entitled to mandatory indemnification under Section 8.52.

In its Restated Articles of Organization (the “Articles of Organization”), the registrant has elected to commit to provide mandatory indemnification to its directors and officers in specified circumstances. Generally, Article 6B of the registrant’s Articles of Organization provides that the registrant shall indemnify directors and officers of the registrant against liabilities and expenses arising out of legal proceedings brought against them by reason of their status as directors or officers or by reason of their agreeing to serve, at the request of the registrant, as a director or officer with another organization. Under this provision, a director or officer of the registrant shall be indemnified by the registrant for all expenses (including attorneys’ fees), judgments and fines, and amounts paid in settlement of such proceedings, even if he is not successful on the merits, unless finally adjudicated not to have acted in good faith in the reasonable belief that his action was in the best interests of the registrant. The registrant shall not indemnify an officer or director who initiates the legal proceeding, unless the initiation was approved by the registrant’s Board of Directors. The registrant shall not indemnify to the extent that directors or officers receive reimbursement from the proceeds of insurance. The Board of Directors may authorize advancing litigation expenses to a director or officer at his request upon receipt of an undertaking by any such director or officer to repay such expenses if it is ultimately determined that he is not entitled to indemnification for such expenses. However, the director or officer must notify the registrant of any suit, after which the registrant is entitled to participate and/or assume the defense of the proceeding. If the registrant does assume the defense of the proceeding, the director or officer shall not be entitled to indemnification of expenses.

Table of Contents

Section 2.02(b)(4) of Chapter 156D of the Massachusetts General Laws allows a corporation to eliminate or limit the personal liability of a director of a corporation to the corporation for monetary damages for a breach of fiduciary duty as a director notwithstanding any provision of law imposing such liability, except where (i) the director breached his duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law or (iii) for any transactions from which the director derived an improper personal benefit. Article 6A of the registrant's Articles of Organization eliminates the personal liability of the registrant's directors to the registrant or its stockholders for monetary damages for breach of a director's fiduciary duty, except to the extent Chapter 156D of the Massachusetts General Laws prohibits the elimination or limitation of such liability.

The registrant has obtained directors and officers' liability insurance for the benefit of its directors and certain of its officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

Item 9. Undertakings.

1. Item 512(a) of Regulation S-K. The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, That paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or

Table of Contents

Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. Item 512(b) of Regulation S-K. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Item 512(h) of Regulation S-K. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the town of Andover, Commonwealth of Massachusetts, on this 7th day of August, 2009.

MKS Instruments, Inc.

By: /s/ Ronald C. Weigner

Ronald C. Weigner
VP, CFO & Treasurer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of MKS Instruments, Inc., hereby severally constitute and appoint Leo Berlinghieri, Ronald C. Weigner and Kathleen F. Burke, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable MKS Instruments, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURES	TITLE	DATE
<u>/s/ John R. Bertucci</u> John R. Bertucci	Chairman of the Board of Directors	August 7, 2009
<u>/s/ Leo Berlinghieri</u> Leo Berlinghieri	Chief Executive Officer, President and Director (Principal Executive Officer)	August 7, 2009
<u>/s/ Ronald C. Weigner</u> Ronald C. Weigner	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	August 7, 2009
<u>/s/ Cristina H. Amon</u> Cristina H. Amon	Director	August 7, 2009
<u>/s/ Robert R. Anderson</u> Robert R. Anderson	Director	August 7, 2009
<u>/s/ Gregory R. Beecher</u> Gregory R. Beecher	Director	August 7, 2009
<u>/s/ Richard S. Chute</u> Richard S. Chute	Director	August 7, 2009
<u>/s/ Peter R. Hanley</u> Peter R. Hanley	Director	August 7, 2009
<u>/s/ Hans-Jochen Kahl</u> Hans-Jochen Kahl	Director	August 7, 2009
<u>/s/ Louis P. Valente</u> Louis P. Valente	Director	August 7, 2009

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
4.1 (1)	Restated Articles of Organization of the Registrant.
4.2 (2)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 18, 2001.
4.3 (3)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 16, 2002.
4.4 (4)	Amended and Restated By-Laws of the Registrant.
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP.
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1).
23.2	Consent of PricewaterhouseCoopers LLP.
24.1	Power of Attorney (included in the signature pages of this Registration Statement).
99.1 (5)	Fourth Amended and Restated 1999 Employee Stock Purchase Plan.
99.2 (5)	Third Amended and Restated International Employee Stock Purchase Plan.
<hr/>	
(1)	Incorporated herein by reference from the Registrant's Registration Statement on Form S-4 (File No. 333-49738) filed with the Securities and Exchange Commission on November 13, 2000.
(2)	Incorporated herein by reference from the Registrant's Quarterly Report on Form 10-Q (File No. 000-23621) for the quarter ended June 30, 2001.
(3)	Incorporated herein by reference from the Registrant's Quarterly Report on Form 10-Q (File No. 000-23621) for the quarter ended June 30, 2002.
(4)	Incorporated herein by reference from the Registrant's Registration Statement on Form S-1A (File No. 333-71363) filed with the Securities and Exchange Commission on March 2, 1999.
(5)	Incorporated herein by reference from the Registrant's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 6, 2009.

August 7, 2009

WILMERHALE

Mark G. Borden

+1 617 526 6675(f)

+1 617 526 5000(f)

mark.borden@wilmerhale.com

MKS Instruments, Inc.
2 Tech Drive, Suite 201
Andover, MA 01810

Re: Fourth Amended and Restated 1999 Employee Stock Purchase Plan
Third Amended and Restated International Employee Stock Purchase Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 850,000 shares of common stock, no par value per share (the "Shares"), of MKS Instruments, Inc., a Massachusetts corporation (the "Company"), issuable under the Company's Fourth Amended and Restated 1999 Employee Stock Purchase Plan and Third Amended and Restated International Employee Stock Purchase Plan (collectively, the "Plans").

We have examined the Certificate of Incorporation and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plans, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of The Commonwealth of Massachusetts and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plans, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under

the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Mark G. Borden

Mark G. Borden

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 27, 2009 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in MKS Instruments, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Boston, MA

August 7, 2009