

Registration No. 333-_____

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 Number)

SIX SHATTUCK ROAD, ANDOVER, MASSACHUSETTS
(Address of Principal Executive Offices)

01810
(Zip Code)

AMENDED AND RESTATED 1995 STOCK INCENTIVE PLAN
(Full Title of the Plan)

JOHN R. BERTUCCI
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
MKS INSTRUMENTS, INC.
SIX SHATTUCK ROAD
ANDOVER, MA 01810
(Name and Address of Agent for Service)

(978) 975-2350
(Telephone Number, Including Area Code, of Agent for Service)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock no par value per share	6,000,000 shares	\$21.19(1)	\$127,140,000(1)	\$31,785

(1) Computed in accordance with Rules 457(c) and (h) under the Securities Act of 1933, as amended and based upon the average high and low prices of Common Stock on January 25, 2001.

STATEMENT OF INCORPORATION BY REFERENCE

Except as otherwise set forth below, this Registration Statement on Form S-8 incorporates by reference the contents of the Registration Statement on Form S-8, File No. 333-78071, relating to the Registrant's Amended and Restated 1995 Stock Incentive Plan.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 Andover, Massachusetts on January 25, 2001.

MKS INSTRUMENTS, INC.

By: /s/ John R. Bertucci

 John R. Bertucci
 Chairman of the Board and Chief
 Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of MKS Instruments, Inc. hereby severally constitute and appoint John R. Bertucci, Ronald C. Weigner and Mark G. Borden, 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 behalf in our capacities as officers and directors to enable MKS Instruments, Inc. to comply with all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT, THIS REGISTRATION STATEMENT HAS BEEN SIGNED BY THE FOLLOWING PERSONS IN THE CAPACITIES AND ON THE DATES INDICATED.

Signature -----	Title -----	Date ----
/s/ John R. Bertucci ----- John R. Bertucci	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	January 25, 2001
/s/ Ronald C. Weigner ----- Ronald C. Weigner	Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	January 25, 2001
/s/ Richard S. Chute ----- Richard S. Chute	Director	January 25, 2001
/s/ Owen W. Robbins ----- Owen W. Robbins	Director	January 25, 2001
/s/ Robert J. Therrien ----- Robert J. Therrien	Director	January 25, 2001
/s/ Louis P. Valente ----- Louis P. Valente	Director	January 25, 2001

EXHIBIT INDEX

Exhibit Number -----	Description -----
4.1 (1)	Restated Articles of Organization of the Registrant.
4.2 (2)	Amended and Restated By-Laws of the Registrant.
4.3 (2)	Specimen Certificate for Common Stock of the Registrant.
4.4	Amended and Restated 1995 Stock Incentive Plan and First Amendment thereto.
5	Opinion of Hale and Dorr LLP.
23.1	Consent of Hale and Dorr LLP (included in Exhibit 5).
23.2	Consent of PricewaterhouseCoopers LLP.
24	Power of Attorney (included in the signature pages of this Registration Statement).
(1)	Incorporated herein by reference from the Registrant's Registration Statement on Form S-4 (File No. 333-49738) originally filed with the Securities and Exchange Commission on November 13, 2000, as amended.
(2)	Incorporated herein by reference from the Registrant's Registration Statement on Form S-1 (File No. 333-71363) originally filed with the Securities and Exchange Commission on January 28, 1999, as amended.

FIRST AMENDMENT TO
AMENDED AND RESTATED 1995 STOCK INCENTIVE PLAN
OF
MKS INSTRUMENTS, INC.

The Amended and Restated 1995 Stock Incentive Plan (the "Plan") be and hereby is amended by deleting the first sentence of Section 4(a) thereof in its entirety and inserting in lieu thereof the following:

"Beginning July 1, 2000 and subject to adjustment under Section 4(c), the number of shares of Common Stock (as defined below in Section 4(d)) available for Awards under the Plan shall annually increase by 4% of the total shares of the Company's outstanding Common Stock on July 1 of each year. Such annual increase shall occur until such time as the aggregate number of shares of Common Stock which may be issued under the Plan is 9,750,000 shares."

Adopted by the Board of Directors on January 31, 2000.
Approved by the Stockholders on May 17, 2000.

MKS INSTRUMENTS, INC.

AMENDED AND RESTATED 1995 STOCK INCENTIVE PLAN

1. PURPOSE

The purpose of this Amended and Restated 1995 Stock Incentive Plan (the "Plan") of MKS Instruments, Inc., a Massachusetts corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing such persons with equity ownership opportunities and performance-based incentives and thereby better aligning the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any present or future subsidiary corporations of MKS Instruments, Inc. as defined in Section 424(f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code").

2. ELIGIBILITY

All of the Company's employees, officers, directors, consultants and advisors are eligible to be granted options, restricted stock, or other stock-based awards (each, an "Award") under the Plan. Any person who has been granted an Award under the Plan shall be deemed a "Participant."

3. ADMINISTRATION, DELEGATION

a. ADMINISTRATION BY BOARD OF DIRECTORS. The Plan will be administered by the Board of Directors of the Company (the "Board"). The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.

b. DELEGATION TO EXECUTIVE OFFICERS. To the extent permitted by applicable law, the Board may delegate to one or more executive officers of the Company the power to make Awards and exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the maximum number of shares subject to Awards and the maximum number of shares for any one Participant to be made by such executive officers. The Chief Executive Officer of the Company may grant Awards to non-executive officer employees of the Company in amounts not to exceed 300,000 shares in the aggregate or 20,000 shares to any one employee.

c. APPOINTMENT OF COMMITTEES. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). If and when the Common Stock (as defined below in Section 4(d)) is registered under the Securities Exchange Act of 1934 (the "Exchange Act"), the Board shall appoint one such Committee of not less than two members, each member of which shall be an "outside director" within the meaning of Section 162(m) of the Code and a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act. All references in the Plan to the "Board" shall mean the Board or a Committee of the Board or the executive officer referred to in Section 3(b) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or executive officer.

4. STOCK AVAILABLE FOR AWARDS

a. NUMBER OF SHARES. Subject to adjustment under Section 4(c), Awards may be made under the Plan for up to 2,500,000 shares of Common Stock (as defined below in Section 4(d)). If any Award expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part or results in any Common Stock not being issued, the unused Common Stock (as defined below in Section 4(d)) covered by such Award shall again be available for the grant of Awards under the Plan, subject, however, in the case of Incentive Stock Options (as hereinafter defined), to any limitation required under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares. All share amounts set forth in this plan reflect the 2,110-for-1 stock split approved by the Board of Directors of the Company on December 31, 1997 (the "1997 Stock Split").

b. PER-PARTICIPANT LIMIT. Subject to adjustment under Section 4(c), for Awards granted after the Common Stock (as defined below in Section 4(d)) is registered under the Exchange Act, the maximum number of shares with respect to which an Award may be granted to any Participant under the Plan shall be 900,000 per calendar year. The per-participant limit described in this Section 4(b) shall be construed and applied consistently with Section 162(m) of the Code.

c. ADJUSTMENT TO COMMON STOCK. In the event, at any time after the 1997 Stock Split, of any stock split, stock dividend, recapitalization, reorganization, merger, consolidation, combination, exchange of shares, liquidation, spin-off or other similar change in capitalization or event, or any distribution to holders of Common Stock (as defined below in Section 4(d)) other than a normal cash dividend, (i) the number and class of securities available under this Plan, (ii) the number and class of security and exercise price per share subject to each outstanding Option, (iii) the repurchase price per security subject to each outstanding Restricted Stock Award and (iv) the terms of each other outstanding stock-based Award shall be appropriately adjusted by the Company (or substituted Awards may be made, if applicable) to the extent the Board shall determine, in good faith, that such an adjustment (or substitution) is necessary and appropriate. If this Section 4(c) applies and Section 8(e)(1) also applies to any event, Section 8(e)(1) shall be applicable to such event and this Section 4(c) shall not be applicable.

d. DEFINITION OF COMMON STOCK. "Common Stock" means (i) prior to the closing of the Company's initial public offering of common stock pursuant to an effective registration statement under the Securities Act of 1933 ("IPO"), the Class B Common Stock, no par value per share, of the Company, and (ii) from and after the closing of the IPO, the Common Stock, no par value per share, of the Company.

5. STOCK OPTIONS

a. GENERAL. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option which is not intended to be an Incentive Stock Option (as hereinafter defined) shall be designated a "Nonstatutory Stock Option."

b. INCENTIVE STOCK OPTIONS. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall only be granted to employees of the Company and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) which is intended to be an Incentive Stock Option is not an Incentive Stock Option.

c. EXERCISE PRICE. The Board shall establish the exercise price at the time each Option is granted and specify it in the applicable option agreement.

d. DURATION OF OPTIONS. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement. No Option will be granted for a term in excess of 10 years.

e. EXERCISE OF OPTION. Options may be exercised only by delivery to the Company of a written notice of exercise signed by the proper person together with payment in full as specified in Section 5(f) for the number of shares for which the Option is exercised.

f. PAYMENT UPON EXERCISE. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

i. in cash or by check, payable to the order of the Company;

ii. except as the Board may otherwise provide in an Option Agreement, delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price, delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price, or by delivery of shares of Common Stock owned by the Participant valued at the fair market value as determined by the Board in good faith ("Fair Market Value"), which Common Stock was owned by the Participant at least six months prior to such delivery;

iii. to the extent permitted by the Board and explicitly provided in an Option Agreement (i) by delivery of a promissory note of the Participant to the Company on terms determined by the Board, or (ii) by payment of such other lawful consideration as the Board may determine; or

iv. any combination of the above permitted forms of payment.

6. RESTRICTED STOCK

a. GRANTS. The Board may grant Awards entitling recipients to acquire shares of Common Stock, subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award (each, "Restricted Stock Award").

b. TERMS AND CONDITIONS. The Board shall determine the terms and conditions of any such Restricted Stock Award, including the conditions for repurchase (or forfeiture) and the issue price, if any. Any stock certificates issued in respect of a Restricted Stock Award shall be registered in the name of the Participant and, unless otherwise determined by the Board, deposited by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "Designated Beneficiary"). In the absence

of an effective designation by a Participant, Designated Beneficiary shall mean the Participant's estate.

7. OTHER STOCK-BASED AWARDS

The Board shall have the right to grant other Awards based upon the Common Stock, having such terms and conditions as the Board may determine including the grant of shares based upon certain conditions, the grant of securities convertible into Common Stock and the grant of stock appreciation rights.

8. GENERAL PROVISIONS APPLICABLE TO AWARDS

a. TRANSFERABILITY OF AWARDS. Except as the Board may otherwise determine or provide in an Award, Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Participant, shall be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.

b. DOCUMENTATION. Each Award under the Plan shall be evidenced by a written instrument in such form as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

c. BOARD DISCRETION. Except as otherwise provided by the Plan, each type of Award may be made alone or in addition or in relation to any other type of Award. The terms of each type of Award need not be identical, and the Board need not treat Participants uniformly.

d. TERMINATION OF STATUS. The Board shall determine the effect on an Award of the disability, death, retirement, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, the Participant's legal representative, conservator, guardian or Designated Beneficiary may exercise rights under the Award.

e. ACQUISITION EVENTS

(1) CONSEQUENCES OF ACQUISITION EVENTS. Upon the occurrence of an Acquisition Event (as defined below), or the execution by the Company of any agreement with respect to an Acquisition Event, the Board shall take any one or more of the following actions with respect to then outstanding Awards: (i) provide that outstanding Options shall be assumed, or equivalent Options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), provided that any such Options substituted for Incentive Stock Options shall satisfy, in the determination of the Board, the requirements of Section 424(a) of the Code; (ii) if the acquisition or succeeding corporation refuses or is unable to assume outstanding Options or grant Options in substitution therefor pursuant to clause (i), upon written notice to the Participants, provide that all then unexercised Options will become exercisable in full as of a specified time (the "Acceleration Time") prior to the Acquisition Event and will terminate immediately prior to the consummation of such Acquisition Event, except to the extent exercised by the Participants between the Acceleration Time and the consummation of such Acquisition

Event; (iii) in the event of an Acquisition Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Acquisition Event (the "Acquisition Price"), provide that all outstanding Options shall terminate upon consummation of such Acquisition Event and each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options; (iv) provide that all Restricted Stock Awards then outstanding shall become free of all restrictions prior to the consummation of the Acquisition Event; and (v) provide that any other stock-based Awards outstanding (A) shall become exercisable, realizable or vested in full, or shall be free of all conditions or restrictions, as applicable to each such Award, prior to the consummation of the Acquisition Event, or (B), if applicable, shall be assumed, or equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof).

An "Acquisition Event" shall mean: (a) any merger or consolidation which results in the voting securities of the Company outstanding immediately prior thereto representing immediately thereafter (either by remaining outstanding or by being converted into voting securities of the surviving or acquiring entity) less than 50% of the combined voting power of the voting securities of the Company or such surviving or acquiring entity outstanding immediately after such merger or consolidation; (b) any sale of all or substantially all of the assets of the Company; or (c) the complete liquidation of the Company.

(2) ASSUMPTION OF OPTIONS UPON CERTAIN EVENTS. The Board may grant Awards under the Plan in substitution for stock and stock-based awards held by employees of another corporation who become employees of the Company as a result of a merger or consolidation of the employing corporation with the Company or the acquisition by the Company of property or stock of the employing corporation. The substitute Awards shall be granted on such terms and conditions as the Board considers appropriate in the circumstances.

f. WITHHOLDING. Each Participant shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with Awards to such Participant no later than the date of the event creating the tax liability. The Board may allow Participants to satisfy such tax obligations in whole or in part in shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value. The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to a Participant.

g. AMENDMENT OF AWARD. The Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Participant's consent to such action shall be required unless the Board determines that the action, taking into account any related action, would not materially and adversely affect the Participant.

h. CONDITIONS ON DELIVERY OF STOCK. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions

from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

i. ACCELERATION. The Board may at any time provide that any Options shall become immediately exercisable in full or in part, that any Restricted Stock Awards shall be free of all restrictions or that any other stock-based Awards may become exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

9. MISCELLANEOUS

a. NO RIGHT TO EMPLOYMENT OR OTHER STATUS. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

b. NO RIGHTS AS STOCKHOLDER. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.

c. EFFECTIVE DATE AND TERM OF PLAN. The Plan shall become effective on the date on which it is adopted by the Board, but no Award granted to a Participant designated as subject to Section 162(m) by the Board shall become exercisable, vested or realizable, as applicable to such Award, unless and until the Plan has been approved by the Company's stockholders. No Awards shall be granted under the Plan after the completion of ten years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date.

d. AMENDMENT OF PLAN. The Board may amend, suspend or terminate the Plan or any portion thereof at any time, provided that no Award granted to a Participant designated as subject to Section 162(m) by the Board after the date of such amendment shall become exercisable, realizable or vested, as applicable to such Award (to the extent that such amendment to the Plan was required to grant such Award to a particular Participant), unless and until such amendment shall have been approved by the Company's stockholders.

e. STOCKHOLDER APPROVAL. For purposes of this Plan, stockholder approval shall mean approval by a vote of the stockholders in accordance with the requirements of Section 162(m) of the Code.

f. GOVERNING LAW. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of The Commonwealth of Massachusetts, without regard to any applicable conflicts of law rules or provisions.

Adopted by the Board of Directors on
November 30, 1995

Adopted by the Stockholders on
May 17, 1996

Approved as Amended and Restated by the
Board of Directors on December 31, 1997

Approved as Amended and Restated by the
Stockholders on January 9, 1998

HALE AND DORR LLP
COUNSELLORS AT LAW

60 STATE STREET, BOSTON, MASSACHUSETTS 02109

617-526-6000 - FAX 617-526-5000

January 29, 2001

MKS Instruments, Inc.
Six Shattuck Road
Andover, MA 01810

Re: Amended and Restated 1995 Stock Incentive 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 under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 6,000,000 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 Amended and Restated 1995 Stock Incentive Plan (the "Plan").

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 copies, the authenticity of the originals of such latter 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 Plan, 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, the General Corporation Law of the state of Delaware and the federal laws of the United States of America.

Based upon and subject to 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 Plan, the Shares will be validly issued, fully paid and nonassessable.

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.

We hereby consent to the filing of this opinion with the Commission as an exhibit to 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,

/s/ Hale and Dorr LLP

HALE AND DORR LLP

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated January 28, 2000 relating to the financial statements, which appears in the 1999 Annual Report to Shareholders of MKS Instruments, Inc., which is incorporated by reference in MKS Instruments, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1999. We also consent to the incorporation by reference of our report dated January 28, 2000 relating to the financial statement schedule, which appears in such Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
January 26, 2001