

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(MARK ONE)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2003

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 0-23621

MKS INSTRUMENTS, INC.

(Exact name of registrant as specified in its charter)

Massachusetts	04-2277512

(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Six Shattuck Road, Andover, Massachusetts	01810

(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (978) 975-2350

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No .

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). Yes No .

Number of shares outstanding of the issuer's common stock as of October 24, 2003: 51,784,301

MKS INSTRUMENTS, INC.
FORM 10-Q
INDEX

PART I FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

Consolidated Balance Sheets -
September 30, 2003 and December 31, 2002

Consolidated Statements of Operations -
Three months and nine months ended September 30, 2003
and 2002

Consolidated Statements of Cash Flows -
Nine months ended September 30, 2003 and 2002

Notes to Consolidated Financial Statements

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL
CONDITION AND RESULTS OF OPERATIONS.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET
RISK.

ITEM 4. CONTROLS AND PROCEDURES.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

MKS INSTRUMENTS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	September 30, 2003	December 31, 2002
	-----	-----
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents.....	\$ 67,100	\$ 88,820
Short-term investments.....	48,513	39,894
Trade accounts receivable, net.....	53,963	45,505
Inventories.....	75,973	73,235
Other current assets.....	7,975	6,098
	-----	-----
Total current assets.....	253,524	253,552
Long-term investments.....	18,243	15,980
Property, plant and equipment, net.....	76,629	82,595
Goodwill, net.....	260,091	259,781
Acquired intangible assets, net.....	58,889	67,720
Other assets.....	5,809	5,995
	-----	-----
Total assets.....	\$ 673,185	\$ 685,623
	=====	=====
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings.....	\$ 14,943	\$ 13,877
Current portion of long-term debt.....	1,800	4,263
Current portion of capital lease obligations.....	37	332
Accounts payable.....	19,143	15,301
Accrued compensation.....	6,040	6,117
Other accrued expenses.....	19,681	21,654
	-----	-----
Total current liabilities.....	61,644	61,544
Long-term debt.....	9,183	11,469
Long-term portion of capital lease obligations.....	115	257
Other liabilities.....	2,439	1,663
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred Stock, \$0.01 par value, 2,000,000 shares authorized; none issued and outstanding.....	---	---
Common Stock, no par value, 200,000,000 shares authorized; 51,772,761 and 51,359,753 issued and outstanding at September 30, 2003 and December 31, 2002, respectively.....	113	113
Additional paid-in capital.....	584,058	579,175
Retained earnings.....	10,102	28,623
Accumulated other comprehensive income.....	5,531	2,779
	-----	-----
Total stockholders' equity.....	599,804	610,690
	-----	-----
Total liabilities and stockholders' equity.....	\$ 673,185	\$ 685,623
	=====	=====

The accompanying notes are an integral part of the consolidated financial statements.

MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2003	2002	2003	2002
	----	----	----	----
Net Sales	\$ 81,568	\$ 92,216	\$ 235,513	\$ 237,215
Cost of sales	53,846	60,391	154,940	156,455
	-----	-----	-----	-----
Gross profit	27,722	31,825	80,573	80,760
Research and development	12,034	12,650	34,719	33,835
Selling, general and administrative	17,090	20,455	52,368	58,234
Amortization of acquired intangible assets	3,612	3,778	11,007	10,120
Restructuring, asset impairment and other charges	330	2,408	634	2,408
Purchase of in-process research and development	---	---	---	8,390
	-----	-----	-----	-----
Loss from operations	(5,344)	(7,466)	(18,155)	(32,227)
Interest expense	173	281	720	862
Interest income	396	714	1,505	2,077
Income from litigation settlement	---	4,200	---	4,200
Other expense	---	4,121	---	4,121
	-----	-----	-----	-----
Loss before income taxes	(5,121)	(6,954)	(17,370)	(30,933)
Provision (benefit) for income taxes	500	(3,129)	1,151	(10,627)
	-----	-----	-----	-----
Net loss	\$ (5,621)	\$ (3,825)	\$ (18,521)	\$ (20,306)
	=====	=====	=====	=====
Net loss per share:				
Basic and diluted	\$ (0.11)	\$ (0.07)	\$ (0.36)	\$ (0.41)
	=====	=====	=====	=====
Weighted average common shares outstanding:				
Basic and diluted	51,625	51,262	51,475	49,567
	=====	=====	=====	=====

The accompanying notes are an integral part of the consolidated financial statements.

MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2003	2002
Cash flows from operating activities:		
Net loss	\$ (18,521)	\$ (20,306)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	22,165	21,165
Purchase of in-process research and development	---	8,390
Asset impairment charges	---	4,988
Deferred taxes	---	(9,319)
Other	79	721
Changes in operating assets and liabilities net of effects of businesses acquired:		
Trade accounts receivable	(6,683)	(11,065)
Inventories	(1,480)	(3,546)
Other current assets	(352)	6,041
Accrued expenses and other current liabilities	(2,761)	(2,377)
Accounts payable	3,727	3,722
Net cash used in operating activities	(3,826)	(1,586)
Cash flows from investing activities:		
Purchases of short-term and long-term investments	(53,471)	(79,881)
Maturities and sales of short-term and long-term investments	41,504	53,852
Purchases of property, plant and equipment	(4,735)	(5,833)
Decrease (increase) in other assets	398	(623)
Proceeds from disposal of assets	70	275
Purchases of businesses, net of cash acquired	(2,150)	(16,298)
Net cash used in investing activities	(18,384)	(48,508)
Cash flows from financing activities:		
Proceeds from short-term borrowings	48,223	10,282
Payments on short-term borrowings	(48,628)	(9,395)
Principal payments on long-term debt	(4,247)	(4,863)
Proceeds from exercise of stock options	4,394	7,544
Principal payments under capital lease obligations	(443)	(327)
Net cash (used in) provided by financing activities	(701)	3,241
Effect of exchange rate changes on cash and cash equivalents	1,191	1,579
Decrease in cash and cash equivalents	(21,720)	(45,274)
Cash and cash equivalents at beginning of period	88,820	120,869
Cash and cash equivalents at end of period	\$ 67,100	\$ 75,595
Supplemental disclosure of cash flow information:		
Noncash transactions during the period:		
Stock issued for acquisitions	\$ 0	\$ 282,341

The accompanying notes are an integral part of the consolidated financial statements.

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Tables in thousands, except per share data)

1) Basis of Presentation

The terms "MKS" and the "Company" refer to MKS Instruments, Inc. and its subsidiaries. The interim financial data as of September 30, 2003 and for the three and nine months ended September 30, 2003 and 2002 is unaudited; however, in the opinion of MKS, the interim data includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the interim periods. The unaudited financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all of the information and note disclosures required by generally accepted accounting principles. The financial statements should be read in conjunction with the December 31, 2002 audited financial statements and notes thereto included in the MKS Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2003.

The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments, including those related to revenue recognition, accounts receivable, inventory, intangible assets, goodwill, other long-lived assets, in-process research and development, income taxes, deferred tax valuation allowance, and investments. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

2) Stock-Based Compensation

The Company applies Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees" and related interpretations in accounting for its stock-based compensation plans. Accordingly, no compensation expense is recorded for options issued to employees in fixed amounts and with fixed exercise prices at least equal to the fair market value of the Company's common stock at the date of grant.

The Company has adopted the provisions of Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation" ("SFAS No. 123"), as amended by SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure," through disclosure only. All stock-based awards to non-employees are accounted for at their fair value in accordance with SFAS No. 123.

The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee awards.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2003	2002	2003	2002
	-----	-----	-----	-----
Net loss:				
Net loss as reported.....	\$ (5,621)	\$ (3,825)	\$ (18,521)	\$ (20,306)
Deduct: Total stock-based employee compensation expense determined under the fair-value-based method for all awards, net of tax.....	(4,305)	(2,011)	(14,345)	(9,010)
Pro forma net loss.....	\$ (9,926)	\$ (5,836)	\$ (32,866)	\$ (29,316)
	=====	=====	=====	=====
Basic and diluted net loss per share:				
Net loss as reported.....	\$ (0.11)	\$ (0.07)	\$ (0.36)	\$ (0.41)
Pro forma net loss.....	\$ (0.19)	\$ (0.11)	\$ (0.64)	\$ (0.59)
	=====	=====	=====	=====

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

There is no tax benefit included in the stock-based employee compensation expense determined under the fair-value-based method for the three and nine months ended September 30, 2003, as the Company established a full valuation allowance for its net deferred tax assets.

3) Recent Accounting Pronouncements

In April 2003, the Financial Accounting Standards Board ("FASB") issued SFAS No. 149 "Amendment of Statement 133 on Derivative Instruments and Hedging Activities" ("SFAS No. 149"). This statement amends SFAS 133 to provide clarification on the financial accounting and reporting of derivative instruments and hedging activities and requires contracts with similar characteristics to be accounted for on a comparable basis. This statement is effective for contracts entered into or modified after June 30, 2003 and for hedging relationships designated after June 30, 2003. The Company adopted SFAS No. 149 on July 1, 2003 and the adoption did not have a material effect on its consolidated financial position or results of operations.

In November 2002, the Emerging Issues Task Force reached a consensus on Issue 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"). EITF 00-21 addresses revenue recognition on arrangements encompassing multiple elements that are delivered at different points in time, defining criteria that must be met for elements to be considered to be a separate unit of accounting. If an element is determined to be a separate unit of accounting, the revenue for the element is recognized at the time of delivery. EITF 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The Company adopted EITF 00-21 on July 1, 2003 and the adoption did not have a material effect on its consolidated financial position or results of operations.

4) Goodwill and Intangible Assets

Intangible Assets

Acquired amortizable intangible assets consisted of the following as of September 30, 2003:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
	-----	-----	-----	-----
Completed technology	\$ 71,575	\$(24,582)	\$ 46,993	6 years
Customer relationships	6,640	(2,432)	4,208	7 years
Patents, trademarks, tradenames and other.....	12,394	(4,706)	7,688	7 years
	-----	-----	-----	
	\$ 90,609	\$(31,720)	\$ 58,889	6 years
	=====	=====	=====	

Acquired amortizable intangible assets consisted of the following as of December 31, 2002:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
	-----	-----	-----	-----
Completed technology	\$ 69,394	\$(15,629)	\$ 53,765	6 years
Customer relationships	6,640	(1,743)	4,897	7 years
Patents, trademarks, tradenames and other.....	12,394	(3,336)	9,058	7 years
	-----	-----	-----	
	\$ 88,428	\$(20,708)	\$ 67,720	6 years
	=====	=====	=====	

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2003 was \$3,612,000 and \$11,007,000 respectively. Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2002 was \$3,778,000 and \$10,120,000, respectively. Estimated amortization expense related to acquired intangibles for each of the five succeeding fiscal years is as follows:

Year ----	Amount -----
2003	\$14,684
2004	14,687
2005	13,786
2006	11,685
2007	11,051

Goodwill

The change in the carrying amount of goodwill during the three and nine months ended September 30, 2003 was not material.

5) Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share:

	Three Months Ended September, 30		Nine Months Ended September 30,	
	2003 ----	2002 ----	2003 ----	2002 ----
Numerator				
Net loss	\$ (5,621)	\$ (3,825)	\$ (18,521)	\$ (20,306)
	=====	=====	=====	=====
Denominator				
Shares used in net loss per common share - basic and diluted	51,625	51,262	51,475	49,567
	=====	=====	=====	=====
Net loss per common share - basic and diluted	\$ (0.11)	\$ (0.07)	\$ (0.36)	\$ (0.41)
	=====	=====	=====	=====

For purposes of computing diluted earnings per share, weighted average common share equivalents do not include stock options with an exercise price greater than the average market price of the common shares during the period. All options outstanding during the three and nine months ended September 30, 2003 and 2002 are excluded from the calculation of diluted net loss per common share because their inclusion would be anti-dilutive. There were options to purchase approximately 7,898,000 and 7,114,000 shares of the Company's common stock outstanding as of September 30, 2003 and 2002, respectively.

6) Inventories

Inventories consist of the following:

	September 30, 2003 ----	December 31, 2002 ----
Raw material.....	\$ 37,726	\$ 36,630
Work in process.....	14,429	11,617
Finished goods.....	23,818	24,988
	-----	-----
	\$ 75,973	\$ 73,235
	=====	=====

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

7) Comprehensive Income (Loss)

The following table illustrates the components of comprehensive loss as required by SFAS 130, "Reporting Comprehensive Income":

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2003	2002	2003	2002
	----	----	----	----
Net loss	\$ (5,621)	\$ (3,825)	\$(18,521)	\$(20,306)
Other comprehensive income, net of taxes:				
Changes in value of financial instruments designated as hedges of currency and interest rate exposures	(1,186)	(127)	(1,024)	(279)
Foreign currency translation adjustment	1,612	(83)	3,837	1,728
Unrealized gain (loss) on investments	(48)	(2)	(61)	61
	-----	-----	-----	-----
Other comprehensive income (loss), net of taxes..	378	(212)	2,752	1,510
	-----	-----	-----	-----
Total comprehensive loss	<u>\$ (5,243)</u>	<u>\$ (4,037)</u>	<u>\$(15,769)</u>	<u>\$(18,796)</u>
	=====	=====	=====	=====

8) Income Taxes

The Company records income taxes using the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. The Company evaluates the realizability of its net deferred tax assets and assesses the need for a valuation allowance on a quarterly basis. The future benefit to be derived from its deferred tax assets is dependent upon its ability to generate sufficient future taxable income to realize the assets. The Company records a valuation allowance to reduce its net deferred tax assets to the amount that may be more likely than not to be realized. To the extent the Company establishes a valuation allowance, an expense will be recorded within the provision for income taxes line on the statement of income.

As a result of incurring significant operating losses since 2001, the Company determined that it is more likely than not that its deferred tax assets may not be realized, and since the fourth quarter of 2002 has established a full valuation allowance for its net deferred tax assets. Accordingly, the Company has not recorded a deferred tax benefit from the net operating loss incurred in the three and nine months ended September 30, 2003. The provision for income taxes for the three and nine months ended September 30, 2003 is comprised of tax expense from foreign operations and state taxes.

In periods subsequent to establishing a valuation allowance, if the Company were to determine that it would be able to realize its net deferred tax assets in excess of their net recorded amount, an adjustment to the valuation allowance would be recorded as a reduction to income tax expense in the period such determination was made. Also in future periods, if the Company were to determine that it would not be able to realize the recorded amount of its net deferred tax assets, an adjustment to the valuation allowance would be recorded as an increase to income tax expense in the period such determination was made.

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

9) Segment Information and Significant Customer

The Company is organized into three operating segments: Instruments and Control Systems, Power and Reactive Gas Products, and Vacuum Products. The Company's operating segments are aggregated into one reportable segment because the products are manufactured and distributed in a similar manner, have similar long-term margins and are sold to a similar customer base.

Information about the Company's operations in different geographic regions is presented in the tables below. Net sales to unaffiliated customers are based on the location in which the sale originated. Transfers between geographic areas are at negotiated transfer prices and have been eliminated from consolidated net sales.

	Three Months Ended		Nine Months Ended	
	September 30, 2003	September 30, 2002	September 30, 2003	September 30, 2002
	----	----	----	----
Geographic net sales				
United States	\$ 47,091	\$ 58,254	\$138,029	\$155,942
Japan	14,196	14,452	40,369	31,238
Europe	11,614	10,831	31,801	28,033
Asia	8,667	8,679	25,314	22,002
	-----	-----	-----	-----
	\$ 81,568	\$ 92,216	\$235,513	\$237,215
	=====	=====	=====	=====

	September 30, 2003	December 31, 2002
	----	----
Long - lived assets		
United States	\$336,277	\$351,063
Japan	10,461	10,875
Europe	8,899	8,734
Asia	45,781	45,419
	-----	-----
	\$401,418	\$416,091
	=====	=====

The Company had one customer comprising 17% and 25% of net sales for the three months ended September 30, 2003 and 2002, respectively, and 17% and 24% for the nine months ended September 30, 2003 and 2002, respectively.

10) Commitments and Contingencies

Legal Matters

On April 3, 2003, Advanced Energy Industries, Inc. ("Advanced Energy") filed suit against MKS in federal district court in Colorado ("Colorado Action"), seeking a declaratory judgment that Advanced Energy's Xstream product does not infringe three patents held by Applied Science and Technology, Inc. ("ASTeX"), a subsidiary of MKS. MKS has filed a motion to dismiss Advanced Energy's complaint, and that motion is now pending before the Colorado court. On May 14, 2003, MKS and ASTeX brought suit in federal district court in Delaware against Advanced Energy for infringement of five ASTeX patents, including the three patents at issue in the Colorado

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

Action. MKS and ASTeX seek injunctive relief and damages for Advanced Energy's infringement. Advanced Energy has moved to dismiss this suit in favor of Advanced Energy's Colorado action, and MKS has opposed Advanced Energy's motion. Advanced Energy's motion to dismiss is now pending before the Delaware court. Both of these cases are in the early stages of pre-trial discovery.

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which was acquired by the Company in April 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants for infringement of On-Line's patent related to its FTIR spectrometer product. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, Inc. filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. In June 2002, the defendants filed a motion for summary judgment. In April 2003, the court granted the motion and dismissed the case. The Company has appealed this decision.

The Company is subject to legal proceedings and claims, which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Company's results of operations, financial condition or cash flows.

11) Acquisitions

On January 31, 2002, the Company completed its acquisition of the ENI Business ("ENI") of Emerson Electric Co., a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor and thin-film processing industries. The reasons for the acquisition of ENI were based upon the ability to offer higher value and more integrated application solutions by combining ENI's solid-state power conversion technology with the Company's core competency in plasma and reactive gas solutions.

On March 13, 2002, the Company acquired Tenta Technology Ltd. ("Tenta"), a company that designs and supplies modular, computer-based process control systems for 300mm semiconductor process tool applications. The reasons for the acquisition were based upon the ability to offer higher value and more integrated application solutions by integrating Tenta's process controllers with MKS digital network products to provide a more complete process control solution.

On April 5, 2002, the Company acquired IPC Fab Automation GmbH ("IPC"), a privately held developer and provider of web-based hardware and software that enables e-diagnostics and advanced process control for advanced manufacturing applications. The acquisitions have been accounted for under the purchase method of accounting.

On September 30, 2003, the Company acquired Wenzel Instruments ("Wenzel"), a privately held developer of solid state MicroElectroMechanical System ("MEMS") based vacuum sensor technology for advanced manufacturing processes.

The results of operations of these acquired companies are included in the Company's consolidated statement of operations as of and since the date of purchase.

The following unaudited pro forma information presents a summary of the historical results of operations of the Company as if the ENI, Tenta and IPC acquisitions had occurred at the beginning of the period.

	Nine Months Ended September 30, 2002
Net sales.....	\$ 241,662
Net loss.....	\$ (14,496)
Net loss per share:	
Basic and diluted.....	\$ (0.28)

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

The unaudited pro forma results for the nine months ended September 30, 2002 excludes approximately \$1,300,000 of non-recurring charges directly related to the transactions. Additionally, the charge for purchase of in-process research and development was not included in the unaudited pro forma results, because it was non-recurring and directly related to the transaction.

12) Restructuring, Asset Impairment and Other Charges

During 2003, the Company continued its consolidation of recent acquisitions that it initiated in 2002 to accelerate product development, rationalize manufacturing operations and reduce operating costs. In the third quarter of 2003, the Company recorded restructuring, asset impairment and other charges of \$330,000. These charges consisted of \$129,000 of severance costs related to workforce reductions and \$201,000 of professional fees and other charges related to the consolidation. The payment of severance costs and professional fees are expected to be complete by the end of 2003.

During the second quarter of 2003, the Company recorded restructuring, asset impairment and other charges of \$304,000. The charges consisted of \$112,000 of severance costs related to workforce reductions, an asset impairment charge of \$92,000 primarily for assets to be disposed, and \$100,000 of professional fees related to the consolidation. The payment of severance costs and professional fees are expected to be complete by the end of 2003.

During the quarter ended September 30, 2002 the Company implemented a consolidation of recent acquisitions to accelerate product development, rationalize manufacturing operations, and reduce operating costs. As a result of these actions, the Company recorded restructuring and asset impairment charges of \$2,408,000. The charges consisted of \$631,000 of severance costs related to a workforce reduction, \$910,000 related to consolidation of leased facilities, and an asset impairment charge of \$867,000 primarily related to the impairment of an intangible asset from the discontinuance of certain product development activities. The workforce reduction was across all functional groups and consisted of 225 employees. The payment of severance costs is expected to be complete by the end of the first quarter of 2004. The facilities consolidation charges will be paid over the respective lease terms ending in 2007.

The following table sets forth the activity in the restructuring reserves from December 31, 2002 to September 30, 2003 related to the 2002 and 2003 initiatives:

	Workforce Reductions	Asset Impairment	Facility Consolidations	Total
	-----	-----	-----	-----
Balance as of December 31, 2002.....	\$ 326	\$ -	\$ 1,164	\$ 1,490
Charges utilized in first quarter.....	(75)	-	(21)	(96)
	-----	-----	-----	-----
Balance as of March 31, 2003.....	251	-	1,143	1,394
Restructuring provision in second quarter.....	112	92	100	304
Charges utilized in second quarter.....	(35)	(92)	(21)	(148)
	-----	-----	-----	-----
Balance as of June 30, 2003.....	328	-	1,222	1,550
Restructuring provision in the third quarter.....	129	-	201	330
Charges utilized in third quarter.....	(373)	-	(201)	(574)
	-----	-----	-----	-----
Balance as of September 30, 2003.....	\$ 84	\$ -	\$ 1,222	\$ 1,306
	=====	=====	=====	=====

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(Tables in thousands, except per share data)

13) Product Warranties

The Company provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, utilization levels, material usage, and supplier warranties on parts delivered to the Company. Should actual product failure rates, utilization levels, material usage or supplier warranties on parts differ from the Company estimates, revisions to the estimated warranty liability would be required.

Product warranty activity for the nine months ended September 30, 2003 was as follows:

Balance as of December 31, 2002.....	\$ 6,921
Provisions for product warranties.....	2,099
Direct charges to the warranty liability.....	(3,279)

Balance as of September 30, 2003.....	\$ 5,741
	=====

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION
AND RESULTS OF OPERATIONS.

We believe that this Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. When used herein, the words "believes," "anticipates," "plans," "expects," "estimates" and similar expressions are intended to identify forward-looking statements. These forward-looking statements reflect management's current opinions and are subject to certain risks and uncertainties that could cause results to differ materially from those stated or implied. We assume no obligation to update this information. Risks and uncertainties include, but are not limited to, those discussed herein in the section entitled "Factors That May Affect Future Results."

OVERVIEW

Our objective is to be the leading worldwide provider of instruments, components, subsystems and process control solutions that improve productivity and return on invested capital for semiconductor and other customers in advanced manufacturing applications.

We are organized into three product groups: Instruments and Control Systems, Power and Reactive Gas Products, and Vacuum Products. Our products are derived from our core competencies in pressure measurement and control, materials delivery, gas and thin-film composition analysis, control and information management, power and reactive gas generation and vacuum technology. Our products are used to manufacture semiconductors; thin film coatings for diverse markets such as flat panel displays, optical and magnetic storage media, architectural glass, and electro-optical products; and medical imaging equipment.

Our customers include semiconductor capital equipment manufacturers, semiconductor device manufacturers, industrial manufacturing companies, medical equipment manufacturers and university, government and industrial research laboratories. For the nine months ended September 30, 2003 and the full year ended December 31, 2002, we estimate that approximately 67% and 70% of our net sales, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers.

A significant portion of our sales are to operations in international markets. International sales include sales by our foreign subsidiaries, but exclude direct export sales, which were less than 10% of our total net sales for each of the years ended December 31, 2002, 2001 and 2000. For the nine months ended September 30, 2003 and the full year ended December 31, 2002, international sales accounted for approximately 41% and 36% of net sales, respectively.

RECENT ACQUISITIONS

On January 31, 2002, we completed the acquisition of the ENI Business ("ENI") of Emerson Electric Co., a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor and thin-film processing industries. We acquired ENI in order to offer higher value and more integrated application solutions by combining ENI's solid-state power conversion technology with our core competency in plasma and reactive gas solutions. The acquisition has been accounted for under the purchase method of accounting.

Also in 2002, we acquired three companies that expanded our position in distributed computer-based process control and data management. On March 13, 2002, we acquired Tenta Technology Ltd. ("Tenta"), a privately held company that designs and supplies modular, computer-based process control systems for 300mm semiconductor process tool applications. On April 5, 2002, we acquired IPC Fab Automation GmbH ("IPC"), a privately held developer and provider of web-based hardware and software that enables e-diagnostics and advanced process control for advanced manufacturing applications. On October 1, 2002, we acquired EquipNet Ltd. ("EquipNet"), a privately held company that develops web-based connectivity equipment for the semiconductor industry.

On September 30, 2003, we acquired Wenzel Instruments ("Wenzel"), a privately held developer of solid state MicroElectroMechanical System ("MEMS") based vacuum sensor technology for advanced manufacturing processes.

The results of operations of these acquired companies are included in our consolidated statement of operations as of and since the date of purchase.

RESULTS OF OPERATIONS

The following table sets forth for the periods indicated the percentage of total net sales of certain line items included in our consolidated statement of income data.

	Three Months Ended		Nine Months Ended	
	September 30, 2003	September 30, 2002	September 30, 2003	September 30, 2002
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of sales	66.0	65.5	65.8	66.0
Gross profit	34.0	34.5	34.2	34.0
Research and development	14.8	13.7	14.7	14.3
Selling, general and administrative	21.0	22.2	22.2	24.5
Amortization of goodwill and acquired intangible assets...	4.4	4.1	4.7	4.3
Restructuring and asset impairment charges	0.4	2.6	0.3	1.0
In-process research and development	--	--	--	3.5
Loss from operations	(6.6)	(8.1)	(7.7)	(13.6)
Interest income, net	0.3	0.5	0.3	0.5
Income from litigation settlement	--	4.6	--	1.8
Other expense	--	4.5	--	1.7
Loss before income taxes	(6.3)	(7.5)	(7.4)	(13.0)
Provision (benefit) for income taxes	0.6	(3.4)	0.5	(4.4)
Net loss	(6.9)%	(4.1)%	(7.9)%	(8.6)%

Net Sales. Net sales decreased \$10.6 million or 11.5 % to \$81.6 million for the three months ended September 30, 2003 from \$92.2 million for the three months ended September 30, 2002. International net sales were approximately \$34.5 million for the three months ended September 30, 2003 or 42.3% of net sales and \$34.0 million for the same period of 2002 or 36.8% of net sales. The decline in net sales was due to decreased domestic demand for our products from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, as compared to the third quarter of 2002.

Net sales decreased \$1.7 million or 0.7% to \$235.5 million for the nine months ended September 30, 2003 from \$237.2 million for the nine months ended September 30, 2002. International net sales were approximately \$97.5 million for the nine months ended September 30, 2003 or 41.4% of net sales and \$81.3 million for the same period of 2002 or 34.3% of net sales. During the nine months ended September 30, 2002, we acquired ENI, Tenta and IPC. These acquisitions increased our net sales by \$2.4 million for the nine months ended September 30, 2003 compared to the prior comparable period, as they were included in net sales for the full period in 2003 while net sales for the nine months ended September 30, 2002 includes their revenues only from the date of acquisition. This increase was offset by decreased domestic demand for our products from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, as compared to the nine months ended September 30, 2002.

The semiconductor capital equipment market has experienced a significant downturn since 2001. As a result, since 2001, we have experienced a significant reduction in demand for products from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers. The semiconductor capital equipment industry has been cyclical, and we cannot determine how long the downturn will last. In the absence of significant improvement, net sales could continue to decline or remain low, and the amount of goodwill, other long-lived assets, and inventory considered realizable could be significantly reduced.

Gross Profit. Gross profit as a percentage of net sales decreased slightly to 34.0% for the three months ended September 30, 2003 from 34.5% for the three months ended September 30, 2002. The decrease was primarily due to lower overhead absorption from the lower volume of sales in 2003, offset partially by reduced material costs. Gross profit as a percentage of net sales increased slightly to 34.2% for the nine months ended September 30, 2003 from 34.0% for the same period of 2002. The small increase in the year to date gross profit percent is mainly due to a favorable foreign exchange impact, offset by higher materials costs of new products in initial production runs.

Research and Development. Research and development expense decreased \$0.6 million or 4.9% to \$12.0 million or 14.8% of net sales for the three months ended September 30, 2003 from \$12.6 million or 13.7% of net sales for the three months ended September 30, 2002. The decrease was primarily due to lower compensation expense of \$0.5 million from lower headcount. Research and development expense increased \$0.9 million or 2.6% to \$34.7 million or 14.7% of net sales for the nine months ended September 30, 2003 from \$33.8 million or 14.3% of net sales for the same period of 2002. The increase was due mainly to increased compensation expense of \$0.7 million, as a result of including a full nine months of costs in 2003 of the companies acquired during 2002.

Selling, General and Administration. Selling, general and administration expenses decreased \$3.4 million or 16.5% to \$17.1 million or 21.0% of net sales for the three months ended September 30, 2003 from \$20.5 million or 22.2% of net sales for the three months ended September 30, 2002. The decrease was due primarily to lower compensation expense, as a result of lower headcount, of \$1.6 million resulting from cost savings initiatives and a decrease in professional fees of \$0.9 million. Selling, general and administrative expenses decreased \$5.9 million or 10.1% to \$52.4 million or 22.2% of net sales for the nine months ended September 30, 2003 from \$58.2 million or 24.5% of net sales for the same period of 2002. The decrease was due primarily to lower compensation expense, as a result of lower headcount, of \$2.1 million resulting from cost savings initiatives and decreased professional fees of \$2.8 million.

Amortization of Acquired Intangible Assets. Amortization expense was \$3.6 million for the quarter ended September 30, 2003, a slight decrease of \$0.2 million or 0.4% from the quarter ended September 30, 2002 as a result of some intangibles being fully amortized. For the nine months ended September 30, 2003, amortization expense was \$11.0 million, an increase of \$0.9 million or 8.8% from the \$10.1 million for the nine months ended September 30, 2002. The increase in amortization during 2003 was due to amortization of intangibles from companies acquired in 2002.

Restructuring, Asset Impairment and Other Charges. During 2003, we continued the consolidation of recent acquisitions and recorded restructuring, asset impairment and other charges of \$0.3 million for the quarter ended September 30, 2003 and \$0.3 million for the quarter ended June 30, 2003. The charges in the third quarter of 2003 consisted of \$0.1 million of severance costs related to workforce reductions and \$0.2 million of professional fees and other costs related to the consolidation. The charges in the second quarter of 2003 consisted of \$0.1 million of severance costs related to workforce reductions, an asset impairment charge of \$0.1 million primarily for assets to be disposed, and \$0.1 million of professional fees related to the consolidation. The severance costs and professional fees are accrued as of September 30, 2003 and are expected to be paid by the end of 2003.

During the quarter ended September 30, 2002 the Company implemented a consolidation of recent acquisitions to accelerate product development, rationalize manufacturing operations, and reduce operating costs. As a result of these actions, the Company recorded restructuring and asset impairment charges of \$2.4 million. The charges consisted of \$0.6 million of severance costs related to a workforce reduction, \$0.9 million related to consolidation of leased facilities, and an asset impairment charge of \$0.9 million primarily related to the impairment of an intangible asset from the discontinuance of certain product development activities. The workforce reduction was across all functional groups and consisted of 225 employees. The payment of severance costs are expected to be completed by the end of the first quarter of 2004. The facilities consolidation charges will be paid over the respective lease terms ending in 2007.

The following table sets forth the activity in the restructuring reserves from December 31, 2002 to September 30, 2003 related to the 2002 and 2003 initiatives:

	Workforce Reductions	Asset Impairment	Facility Consolidations	Total
	(in thousands)			
Balance as of December 31, 2002	\$ 326	\$ -	\$ 1,164	\$ 1,490
Charges utilized in first quarter	(75)	-	(21)	(96)
Balance as of March 31, 2003	251	-	1,143	1,394
Restructuring provision in second quarter	112	92	100	304
Charges utilized in second quarter	(35)	(92)	(21)	(148)
Balance as of June 30, 2003	328	-	1,222	1,550
Restructuring provision in the third quarter..	129	-	201	330
Charges utilized in third quarter	(373)	-	(201)	(574)
Balance as of September 30, 2003	\$ 84	\$ -	\$ 1,222	\$ 1,306
	=====	=====	=====	=====

Purchase of In-process Technology. In-process research and development of \$8.4 million for the nine months ended September 30, 2002 arose from the acquisitions we made in 2002.

Interest Income (Expense), Net. Net interest income decreased to \$0.2 million for the three months ended September 30, 2003 from \$0.4 million for the three months ended September 30, 2002. For the nine months ended September 30, 2003, net interest income was \$0.8 million, a decrease of \$0.4 million from the \$1.2 million in the nine months ended September 30, 2002. The decrease in 2003 is mainly related to slightly lower investment balance and lower interest rates in 2003.

Income from Litigation Settlement. On November 30, 2000, Applied Science and Technology, Inc. ("ASTeX"), which we acquired in January 2001, brought suit in federal district court in Delaware against Advanced Energy Industries, Inc. for infringement of ASTeX's patent related to its Astron product. On May 17, 2002, a jury affirmed the validity of our patent and found that Advanced Energy infringed the patent. On May 31, 2002, based on the jury's findings, the Court entered a judgment on the infringement claim in favor of us and against Advanced Energy, and awarded \$4.2 million in damages to compensate us for Advanced Energy's infringing activity. Advanced Energy filed motions to overturn the verdict. During August of 2002, we entered into an agreement with Advanced Energy whereby Advanced Energy agreed to pay the awarded damages amount to us and withdraw its motions to overturn the verdict. We received the \$4.2 million in September 2002, and recorded the amount as Income from litigation settlement.

Other Expense. During 2001, we sold certain assets for proceeds of approximately \$9.0 million, including a note receivable of approximately \$3.9 million and warrants of \$0.2 million. During 2002, due to the downturn in the semiconductor industry and its result on the acquirer's operations, and the acquirer's inability to raise financing, we considered the value of the note and warrants to be impaired. Accordingly, during 2002, we recorded a charge of \$4.1 million to other expense for our estimate of the impairment on the note receivable and warrants.

Provision (benefit) for Income Taxes. We recorded a provision for income taxes of \$0.5 million and \$1.2 million for the three and nine months ended September 30, 2003, as compared to a tax benefit of \$3.1 million and \$10.6 million for the three and nine months ended September 30, 2002, respectively. As a result of incurring significant operating losses since 2001, we determined that it is more likely than not that our deferred tax assets may not be realized, and since the fourth quarter of 2002 have established a full valuation allowance for our net deferred tax assets. Accordingly, we have not recorded a deferred tax benefit from the net operating loss incurred in the three and nine months ended September 30, 2003. The provision for income taxes in 2003 is comprised of tax expense from foreign operations and state taxes. Until an appropriate level of profitability is reached, we will not record deferred tax benefits from our net operating losses in future results of operations.

LIQUIDITY AND CAPITAL RESOURCES

We had cash, cash equivalents and short-term marketable securities of \$115.6 million at September 30, 2003, a decrease of \$13.1 million from \$128.7 million at December 31, 2002. We have historically financed our operations and capital requirements through a combination of cash provided by operations, long-term real estate financing, capital lease financing and short-term borrowings.

For the nine months ended September 30, 2003, our operating activities used \$3.8 million in cash compared to \$1.6 million for the nine months ended September 30, 2002. The cash used in operations for the nine months ended September 30, 2003 was impacted by the net loss of \$18.5 million and an increase in operating assets of \$8.5 million, offset by non-cash charges included in the net loss for depreciation and amortization of \$22.2 million and an increase in operating liabilities of \$1.0 million. The increase in operating assets consisted mainly of an increase in accounts receivable of \$6.7 million due to the timing of shipments during the quarter. Net cash used in operating activities for the nine months ended September 30, 2002 resulted mainly from a net loss of \$20.3 million, an increase in accounts receivable of \$11.1 million, deferred tax benefits of \$9.3 million, offset by non-cash charges for in-process research and development of \$8.4 million, depreciation and amortization of \$21.2 million, and asset impairment charges of \$5.0 million.

We used \$18.4 million of cash for investing activities in the nine months ended September 30, 2003 and \$48.5 million in the nine months ended September 30, 2002. Investing activities in 2003 consisted of \$4.7 million of purchases of capital assets, net purchases of short and long-term investments of \$12.0 million and \$2.2 million for the purchase of a business. Investing activities in 2002 consisted mainly of net purchases of short and long-term investments of \$26.0 million, \$16.3 million for the acquisition of businesses and \$5.8 million for the purchases of capital assets.

Net cash used in financing activities of \$0.7 million for the nine months ended September 30, 2003 consisted mainly of \$4.7 million of payments on long-term debt and capital lease obligations offset by proceeds from the exercise of stock options of \$4.4 million. Net cash provided by financing activities of \$3.2 million for the nine months ended September 30, 2002 consisted mainly of proceeds from the exercise of stock options of \$7.5 million offset by principal payments \$5.2 million on long-term debt and capital lease obligations.

On July 31, 2003, our \$40.0 million unsecured line of credit facility with two domestic banks expired and we decided not to renew this facility. There had been no borrowings made under this line of credit.

We believe that our working capital, together with the cash anticipated to be generated from operations will be sufficient to satisfy our estimated working capital and planned capital expenditure requirements through at least the next 12 months.

RECENT ACCOUNTING PRONOUNCEMENTS

In April 2003, the Financial Accounting Standards Board ("FASB") issued SFAS No. 149 "Amendment of Statement 133 on Derivative Instruments and Hedging Activities" ("SFAS No. 149"). This statement amends SFAS 133 to provide clarification on the financial accounting and reporting of derivative instruments and hedging activities and requires contracts with similar characteristics to be accounted for on a comparable basis. This statement is effective for contracts entered into or modified after June 30, 2003 and for hedging relationships designated after June 30, 2003. We adopted SFAS No. 149 on July 1, 2003 and the adoption did not have a material effect on our consolidated financial position or results of operations.

In November 2002, the Emerging Issues Task Force reached a consensus on Issue 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"). EITF 00-21 addresses revenue recognition on arrangements encompassing multiple elements that are delivered at different points in time, defining criteria that must be met for elements to be considered to be a separate unit of accounting. If an element is determined to be a separate unit of accounting, the revenue for the element is recognized at the time of delivery. EITF 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. We adopted EITF 00-21 on July 1, 2003 and the adoption did not have a material effect on our consolidated financial position or results of operations.

FACTORS THAT MAY AFFECT FUTURE RESULTS

OUR BUSINESS DEPENDS SUBSTANTIALLY ON CAPITAL SPENDING IN THE SEMICONDUCTOR INDUSTRY WHICH IS CHARACTERIZED BY PERIODIC FLUCTUATIONS THAT MAY CAUSE A REDUCTION IN DEMAND FOR OUR PRODUCTS.

We estimate that approximately 70%, 64% and 76% of our sales during 2002, 2001 and 2000, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers, and we expect that sales to such customers will continue to account for a substantial majority of our sales. Our business depends upon the capital expenditures of semiconductor device manufacturers, which in turn depend upon the demand for semiconductors. Periodic reductions in demand for the products manufactured by semiconductor capital equipment manufacturers and semiconductor device manufacturers may adversely affect our business, financial condition and results of operations. Historically, the semiconductor market has been highly cyclical and has experienced periods of overcapacity, resulting in significantly reduced demand for capital equipment. Most recently, in 2001, 2002 and 2003, we have experienced a significant reduction in demand from OEM customers, and lower gross margins due to reduced absorption of manufacturing overhead. As a result of this significant reduction in demand, particularly for older technology products, we incurred significant charges for excess and obsolete inventory of \$16.6 million in 2001. In addition, many semiconductor manufacturers have operations and customers in Asia, a region which in recent years has experienced serious economic problems including currency devaluations, debt defaults, lack of liquidity and recessions. We cannot be certain that semiconductor downturns will not continue or recur. A decline in the level of orders as a result of any future downturn or slowdown in the semiconductor capital equipment industry could have a material adverse effect on our business, financial condition and results of operations.

OUR QUARTERLY OPERATING RESULTS HAVE VARIED, AND ARE LIKELY TO CONTINUE TO VARY SIGNIFICANTLY. THIS MAY RESULT IN VOLATILITY IN THE MARKET PRICE FOR OUR SHARES.

A substantial portion of our shipments occur shortly after an order is received and therefore we operate with a low level of backlog. As a result, a decrease in demand for our products from one or more customers could occur with limited advance notice and could have a material adverse effect on our results of operations in any particular period. A significant percentage of our expenses are relatively fixed and based in part on expectations of future net sales. The inability to adjust spending quickly enough to compensate for any shortfall would magnify the adverse impact of a shortfall in net sales on our results of operations. Factors that could cause fluctuations in our net sales include:

- the timing of the receipt of orders from major customers;
- shipment delays;
- disruption in sources of supply;
- seasonal variations of capital spending by customers;
- production capacity constraints; and
- specific features requested by customers.

For example, the semiconductor capital equipment market experienced a significant downturn during 2001, 2002 and 2003. As a result, we experienced a reduction in demand from OEM customers, which has had a material adverse effect on our quarterly operating results during these years. During 2001, gross margins were negatively affected by significant charges for excess and obsolete inventory of \$2.6 million in the second quarter and \$14.0 million in the fourth quarter. These charges were primarily caused by a significant reduction in demand including reduced demand for older technology products. As a result of the factors discussed above, it is likely that we will in the future experience quarterly or annual fluctuations and that, in one or more future quarters, our operating results will fall below the expectations of public market analysts or investors. In any such event, the price of our common stock could decline significantly.

THE LOSS OF NET SALES TO ANY ONE OF OUR MAJOR CUSTOMERS WOULD LIKELY HAVE A MATERIAL ADVERSE EFFECT ON US.

Our top ten customers accounted for approximately 49%, 39% and 52% of our net sales in 2002, 2001 and 2000, respectively. The loss of a major customer or any reduction in orders by these customers, including reductions due to market or competitive conditions, would likely have a material adverse effect on our business, financial condition and results of operations. During 2002, 2001 and 2000, one customer, Applied Materials, accounted for approximately 23%, 18% and 30%, respectively, of our net sales. None of our significant customers, including Applied Materials, has entered into an agreement requiring it to purchase any minimum quantity of our products. The demand for our products from our semiconductor capital equipment customers depends in part on orders received by them from their semiconductor device manufacturer customers.

Attempts to lessen the adverse effect of any loss or reduction through the rapid addition of new customers could be difficult because prospective customers typically require lengthy qualification periods prior to placing volume orders with a new supplier. Our future success will continue to depend upon:

- our ability to maintain relationships with existing key customers;
- our ability to attract new customers;
- our ability to introduce new products in a timely manner for existing and new customers; and
- the success of our customers in creating demand for their capital equipment products which incorporate our products.

AS PART OF OUR BUSINESS STRATEGY, WE HAVE ENTERED INTO AND MAY ENTER INTO OR SEEK TO ENTER INTO BUSINESS COMBINATIONS AND ACQUISITIONS THAT MAY BE DIFFICULT TO INTEGRATE, DISRUPT OUR BUSINESS, DILUTE STOCKHOLDER VALUE OR DIVERT MANAGEMENT ATTENTION.

We have made several acquisitions since 2000. As a part of our business strategy, we may enter into additional business combinations and acquisitions. Acquisitions are typically accompanied by a number of risks, including the difficulty of integrating the operations and personnel of the acquired companies, the potential disruption of our ongoing business and distraction of management, expenses related to the acquisition and potential unknown liabilities associated with acquired businesses.

As a result of our recent acquisitions, we have added several different decentralized accounting systems, resulting in a complex reporting environment. We expect that we will need to continue to modify our accounting policies, internal controls, procedures and compliance programs to provide consistency across all our operations.

If we are not successful in completing acquisitions that we may pursue in the future, we may be required to reevaluate our growth strategy, and we may have incurred substantial expenses and devoted significant management time and resources in seeking to complete proposed acquisitions that will not generate benefits for us.

In addition, with future acquisitions, we could use substantial portions of our available cash as all or a portion of the purchase price. We could also issue additional securities as consideration for these acquisitions, which could cause significant stockholder dilution. Our recent acquisitions and any future acquisitions may not ultimately help us achieve our strategic goals and may pose other risks to us.

AN INABILITY TO CONVINCE SEMICONDUCTOR DEVICE MANUFACTURERS TO SPECIFY THE USE OF OUR PRODUCTS TO OUR CUSTOMERS, WHO ARE SEMICONDUCTOR CAPITAL EQUIPMENT MANUFACTURERS, WOULD WEAKEN OUR COMPETITIVE POSITION.

The markets for our products are highly competitive. Our competitive success often depends upon factors outside of our control. For example, in some cases, particularly with respect to mass flow controllers, semiconductor device manufacturers may direct semiconductor capital equipment manufacturers to use a specified supplier's product in their equipment. Accordingly, for such products, our success will depend in part on our ability to have semiconductor device manufacturers specify that our products be used at their semiconductor fabrication facilities. In addition, we may encounter difficulties in changing established relationships of competitors that already have a large installed base of products within such semiconductor fabrication facilities.

IF OUR PRODUCTS ARE NOT DESIGNED INTO SUCCESSIVE NEW GENERATIONS OF OUR CUSTOMERS' PRODUCTS, WE WILL LOSE SIGNIFICANT NET SALES DURING THE LIFESPAN OF THOSE PRODUCTS.

New products designed by semiconductor capital equipment manufacturers typically have a lifespan of five to ten years. Our success depends on our products being designed into new generations of equipment for the semiconductor industry. We must develop products that are technologically current so that they are positioned to be chosen for use in each successive new generation of semiconductor capital equipment. If our products are not chosen by our customers, our net sales may be reduced during the lifespan of our customers' products. In addition, we must make a significant capital investment to develop products for our customers well before our products are introduced and before we can be sure that we will recover our capital investment through sales to the customers in significant volume. We are thus also at risk during the development phase that our products may fail to meet our customers' technical or cost requirements and may be replaced by a competitive product or alternative technology solution. If that happens, we may be unable to recover our development costs.

THE SEMICONDUCTOR INDUSTRY IS SUBJECT TO RAPID DEMAND SHIFTS WHICH ARE DIFFICULT TO PREDICT. AS A RESULT, OUR INABILITY TO EXPAND OUR MANUFACTURING CAPACITY IN RESPONSE TO THESE RAPID SHIFTS MAY CAUSE A REDUCTION IN OUR MARKET SHARE.

Our ability to increase sales of certain products depends in part upon our ability to expand our manufacturing capacity for such products in a timely manner. If we are unable to expand our manufacturing capacity on a timely basis or to manage such expansion effectively, our customers could implement our competitors' products and, as a result, our market share could be reduced. Because the semiconductor industry is subject to rapid demand shifts which are difficult to foresee, we may not be able to increase capacity quickly enough to respond to a rapid increase in demand in the semiconductor industry. Additionally, capacity expansion could increase our fixed operating expenses and if sales levels do not increase to offset the additional expense levels associated with any such expansion, our business, financial condition and results of operations could be materially adversely affected.

THE COMPANY OPERATES IN A HIGHLY COMPETITIVE INDUSTRY.

The market for our products is highly competitive. Principal competitive factors include:

- historical customer relationships;
- product quality, performance and price;
- breadth of product line;
- manufacturing capabilities; and
- customer service and support.

Although we believe that we compete favorably with respect to these factors, there can be no assurance that we will continue to do so. We encounter substantial competition in most of our product lines. Certain of our competitors may have greater financial and other resource than we have. In some cases, competitors are smaller than we are, but well established in specific product niches. We may encounter difficulties in changing established relationships of competitors with a large installed base of products at such customers' fabrication facilities. In addition, our competitors can be expected to continue to improve the designs and performance of their products. There can be no assurance that competitors will not develop products that offer price or performance features superior to those of our products.

SALES TO FOREIGN MARKETS CONSTITUTE A SUBSTANTIAL PORTION OF OUR NET SALES; THEREFORE, OUR NET SALES AND RESULTS OF OPERATIONS COULD BE ADVERSELY AFFECTED BY DOWNTURNS IN ECONOMIC CONDITIONS IN COUNTRIES OUTSIDE OF THE UNITED STATES.

International sales include sales by our foreign subsidiaries, but exclude direct export sales, which were less than 10% of our total net sales for each of the years ended December 31, 2002, 2001 and 2000. International sales accounted for approximately 41%, 36%, 31% and 23% of net sales for the nine months ended September 30, 2003 and the years ended December 31, 2002, 2001 and 2000, respectively, a significant portion of which were sales to Japan.

We anticipate that international sales will continue to account for a significant portion of our net sales. In addition, certain of our key domestic customers derive a significant portion of their revenues from sales in international markets. Therefore, our sales and results of operations could be adversely affected by economic slowdowns and other risks associated with international sales.

RISKS RELATING TO OUR INTERNATIONAL OPERATIONS COULD ADVERSELY AFFECT OUR OPERATING RESULTS.

We have substantial international sales, service and manufacturing operations in Europe and Asia, which exposes us to foreign operational and political risks that may harm our business. Our international operations are subject to inherent risks, which may adversely affect us, including:

- political and economic instability in countries where we have sales, service and manufacturing operations, particularly in Asia;
- fluctuations in the value of currencies and high levels of inflation, particularly in Asia and Europe;
- changes in labor conditions and difficulties in staffing and managing foreign operations, including, but not limited to, labor unions;
- greater difficulty in collecting accounts receivable and longer payment cycles;
- burdens and costs of compliance with a variety of foreign laws;
- increases in duties and taxation;
- imposition of restrictions on currency conversion or the transfer of funds;
- changes in export duties and limitations on imports or exports;
- expropriation of private enterprises; and
- unexpected changes in foreign regulations.

If any of these risks materialize, our operating results may be adversely affected.

UNFAVORABLE CURRENCY EXCHANGE RATE FLUCTUATIONS MAY LEAD TO LOWER GROSS MARGINS, OR MAY CAUSE US TO RAISE PRICES WHICH COULD RESULT IN REDUCED SALES.

Currency exchange rate fluctuations could have an adverse effect on our net sales and results of operations and we could experience losses with respect to our hedging activities. Unfavorable currency fluctuations could require us to increase prices to foreign customers which could result in lower net sales by us to such customers. Alternatively, if we do not adjust the prices for our products in response to unfavorable currency fluctuations, our results of operations could be adversely affected. In addition, sales made by our foreign subsidiaries are denominated in the currency of the country in which these products are sold and the currency it receives in payment for such sales could be less valuable at the time of receipt as a result of exchange rate fluctuations. We enter into forward exchange contracts and local currency purchased options to reduce currency exposure arising from intercompany sales of inventory. However, we cannot be certain that our efforts will be adequate to protect us against significant currency fluctuations or that such efforts will not expose us to additional exchange rate risks.

KEY PERSONNEL MAY BE DIFFICULT TO ATTRACT AND RETAIN.

Our success depends to a large extent upon the efforts and abilities of a number of key employees and officers, particularly those with expertise in the semiconductor manufacturing and similar industrial manufacturing industries. The loss of key employees or officers could have a material adverse effect on our business, financial condition and results of operations. We believe that our future success will depend in part on our ability to attract and retain highly skilled technical, financial, managerial and marketing personnel. We cannot be certain that we will be successful in attracting and retaining such personnel.

OUR PROPRIETARY TECHNOLOGY IS IMPORTANT TO THE CONTINUED SUCCESS OF OUR BUSINESS. OUR FAILURE TO PROTECT THIS PROPRIETARY TECHNOLOGY MAY SIGNIFICANTLY IMPAIR OUR COMPETITIVE POSITION.

As of September 30, 2003, we owned 185 U.S. patents and 126 foreign patents and had 83 pending U.S. patent applications. Although we seek to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we cannot be certain that:

- we will be able to protect our technology adequately;
- competitors will not be able to develop similar technology independently;
- any of our pending patent applications will be issued;
- intellectual property laws will protect our intellectual property rights; or
- third parties will not assert that our products infringe patent, copyright or trade secrets of such parties.

PROTECTION OF OUR INTELLECTUAL PROPERTY RIGHTS MAY RESULT IN COSTLY LITIGATION.

Litigation may be necessary in order to enforce our patents, copyrights or other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. We have been in the past, and currently are, involved in lawsuits enforcing our intellectual property rights, and may be involved in such litigation in the future. Such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition and results of operations.

THE MARKET PRICE OF OUR COMMON STOCK HAS FLUCTUATED AND MAY CONTINUE TO FLUCTUATE FOR REASONS OVER WHICH WE HAVE NO CONTROL.

The stock market has from time to time experienced, and is likely to continue to experience, extreme price and volume fluctuations. Prices of securities of technology companies have been especially volatile and have often fluctuated for reasons that are unrelated to the operating performance of the companies. The market price of shares of our common stock has fluctuated greatly since our initial public offering and could continue to fluctuate due to a variety of factors. In the past, companies that have experienced volatility in the market price of their stock have been the objects of securities class action litigation. If we were the object of securities class action litigation, it could result in substantial costs and a diversion of our management's attention and resources.

OUR DEPENDENCE ON SOLE, LIMITED SOURCE SUPPLIERS, AND INTERNATIONAL SUPPLIERS, COULD AFFECT OUR ABILITY TO MANUFACTURE PRODUCTS AND SYSTEMS.

We rely on sole, limited source suppliers, and international suppliers, for a few of our components and subassemblies that are critical to the manufacturing of our products. This reliance involves several risks, including the following:

- the potential inability to obtain an adequate supply of required components;
- reduced control over pricing and timing of delivery of components; and
- the potential inability of our suppliers to develop technologically advanced products to support our growth and development of new systems.

We believe that in time we could obtain and qualify alternative sources for most sole, limited source and international supplier parts. Seeking alternative sources of the parts could require us to redesign our systems, resulting in increased costs and likely shipping delays. We may be unable to redesign our systems, which could result in further costs and shipping delays. These increased costs would decrease our profit margins if we could not pass the costs to our customers. Further, shipping delays could damage our relationships with current and potential customers and have a material adverse effect on our business and results of operations.

WE ARE SUBJECT TO GOVERNMENTAL REGULATIONS.

We are subject to federal, state, local and foreign regulations, including environmental regulations and regulations relating to the design and operation of our power supply products. We must ensure that these systems meet certain safety standards, many of which vary across the countries in which our systems are used. For example, the European Union has published directives specifically relating to power supplies. We must comply with these directives in order to ship our systems into countries that are members of the European Union. We believe we are in compliance with current applicable regulations, directives and standards and have obtained all necessary permits, approvals, and authorizations to conduct our business. However, compliance with future regulations, directives and standards could require us to modify or redesign certain systems, make capital expenditures or incur substantial costs. If we do not comply with current or future regulations, directives and standards:

- we could be subject to fines;
- our production could be suspended; or
- we could be prohibited from offering particular systems in specified markets.

CERTAIN STOCKHOLDERS HAVE A SUBSTANTIAL INTEREST IN US AND MAY BE ABLE TO EXERT SUBSTANTIAL INFLUENCE OVER OUR ACTIONS.

As of September 1, 2003, John R. Bertucci, president, chairman and chief executive officer of MKS, and certain members of his family, in the aggregate, beneficially owned approximately 21.3% of our outstanding common stock. As a result, these stockholders, acting together, are able to exert substantial influence over the actions of MKS. Pursuant to the acquisition of the ENI Business of Emerson Electric Co. ("Emerson"), we issued approximately 12,000,000 shares of common stock to Emerson. As of September 1, 2003, Emerson owned approximately 23.2% of our outstanding common stock, and accordingly, Emerson is able to exert substantial influence over our actions.

SOME PROVISIONS OF OUR RESTATED ARTICLES OF ORGANIZATION, AS AMENDED, OUR AMENDED AND RESTATED BY-LAWS AND MASSACHUSETTS LAW COULD DISCOURAGE POTENTIAL ACQUISITION PROPOSALS AND COULD DELAY OR PREVENT A CHANGE IN CONTROL OF THE COMPANY.

Anti-takeover provisions could diminish the opportunities for stockholders to participate in tender offers, including tender offers at a price above the then current market value of the common stock. Such provisions may also inhibit increases in the market price of the common stock that could result from takeover attempts. For example, while we have no present plans to issue any preferred stock, our board of directors, without further stockholder approval, may issue preferred stock that could have the effect of delaying, deterring or preventing a change in control of the Company. The issuance of preferred stock could adversely affect the voting power of the holders of our common stock, including the loss of voting control to others. In addition, our amended and restated by-laws provide for a classified board of directors consisting of three classes. The classified board could also have the effect of delaying, deterring or preventing a change in control of the Company.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Information concerning market risk is contained in the Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2003. We enter into local currency purchased options and forward exchange contracts to reduce currency exposure arising from intercompany sales of inventory. There were no material changes in our exposure to market risk from December 31, 2002.

ITEM 4. CONTROLS AND PROCEDURES.

The Company's management, with the participation of the Company's chief executive officer and chief financial officer, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of September 30, 2003. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that, as of September 30, 2003, the Company's disclosure controls and procedures were (1) designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's chief executive officer and chief financial officer by others within those entities, particularly during the period in which this report was being prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

No change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fiscal quarter ended September 30, 2003 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

On April 3, 2003, Advanced Energy Industries, Inc. ("Advanced Energy") filed suit against MKS in federal district court in Colorado ("Colorado Action"), seeking a declaratory judgment that Advanced Energy's Xstream product does not infringe three patents held by Applied Science and Technology, Inc. ("ASTeX"), a subsidiary of MKS. MKS has filed a motion to dismiss Advanced Energy's complaint, and that motion is now pending before the Colorado court. On May 14, 2003, MKS and ASTeX brought suit in federal district court in Delaware against Advanced Energy for infringement of five ASTeX patents, including the three patents at issue in the Colorado Action. MKS and ASTeX seek injunctive relief and damages for Advanced Energy's infringement. Advanced Energy has moved to dismiss this suit in favor of Advanced Energy's Colorado action, and MKS has opposed Advanced Energy's motion. Advanced Energy's motion to dismiss is now pending before the Delaware court. Both of these cases are in the early stages of pre-trial discovery.

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which was acquired by the Company in April 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants for infringement of On-Line's patent related to its FTIR spectrometer product. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, Inc. filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. In June 2002, the defendants filed a motion for summary judgment. In April 2003 the court granted the motion and dismissed the case. The Company has appealed this decision.

There have been no other material developments since the filing of MKS' Quarterly Report on Form 10-Q on August 13, 2003.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits

Exhibit No. -----	Exhibit Description -----
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(b) Reports on Form 8-K

On July 22, 2003, the Company furnished a Current Report on Form 8-K under "Item 9. Regulation FD Disclosure" (Information furnished pursuant to Item 12. "Disclosure of Results of Operations and Financial Condition") containing a copy of its earnings release for the period ended June 30, 2003.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MKS INSTRUMENTS, INC.

November 6, 2003

By: /s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, John R. Bertucci, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MKS Instruments, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules-13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release 34-47986]
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2003

/s/ John R. Bertucci

John R. Bertucci
Chairman, Chief Executive Officer & President
(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Ronald C. Weigner, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of MKS Instruments, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules-13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) [Paragraph omitted in accordance with SEC transition instructions contained in SEC Release 34-47986]
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2003

/s/ Ronald C. Weigner

Ronald C. Weigner
Vice President & Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of MKS Instruments, Inc. (the "Company") for the period ended September 30, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, John R. Bertucci, Chairman, Chief Executive Officer and President of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 6, 2003

/s/ John R. Bertucci

John R. Bertucci

Chairman, Chief Executive Officer and President

CERTIFICATION OF CHIEF FINANCIAL OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of MKS Instruments, Inc. (the "Company") for the period ended September 30, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Ronald C. Weigner, Vice President and Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 6, 2003

/s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer