SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(MARK ONE)

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

For the quarterly period ended March 31, 2002

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 (State or other jurisdiction of incorporation or organization)	04-2277512 (I.R.S. Employer Identification No.)
Six Shattuck Road, Andover, Massachusetts (Address of principal executive offices)	01810 (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 X No __.

Number of shares outstanding of the issuer's common stock as of April 30, 2002: 51,099,212

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	March 31, 2002 (Unaudited)	December 31, 2001
ASSETS		
Current assets:		
Cash and cash equivalents	$ 97,120	$ 120,869
Short-term investments	31,682	16,625
Trade accounts receivable, net	49,661	35,778
Inventories	79,104	56,954
Deferred tax asset	20,285	16,426
Other current assets	13,094	16,353
Total current assets	290,946	263,005
Property, plant and equipment, net	86,325	69,634
Goodwill and acquired intangible assets, net	316,120	52,285
Long-term investments	12,883	11,029
Other assets	13,674	15,236
Total assets	$ 719,948	$ 411,189
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings	$ 10,651	$ 9,238
Current portion of long-term debt	4,817	5,074
Current portion of capital lease obligations	459	503
Accounts payable	16,763	9,668
Accrued compensation	7,765	6,116
Other accrued expenses	26,413	15,551
Total current liabilities	66,868	46,150
Long-term debt	15,442	10,916
Long-term portion of capital lease obligations	263	341
Deferred tax liability	11,378	---
Other liabilities	784	911
Commitments and contingencies		
Stockholders' equity:		
Preferred Stock, $0.01 par value, 2,000,000 shares authorized; none issued and outstanding	---	---
Common Stock, no par value, 75,000,000 shares authorized; 50,974,344 and 37,998,699 issued and outstanding at March 31, 2002 and December 31, 2001, respectively	113	113
Additional paid-in capital	569,932	285,252
Retained earnings	56,373	68,160
Accumulated other comprehensive loss	(1,205)	(654)
Total stockholders' equity	625,213	352,871
Total liabilities and stockholders' equity	$ 719,948	$ 411,189

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

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

	Three Months Ended March 31, 2002	Three Months Ended March 31, 2001
Net sales	$ 59,067	$ 110,888
Cost of sales	39,847	67,693
Gross profit	19,220	43,195
Research and development	9,132	11,151
Selling, general and administrative	17,058	19,057
Amortization of goodwill and acquired intangible assets	2,205	2,240
Goodwill impairment charge	--	3,720
Merger expenses	--	7,708
Purchase of in-process research and development	6,100	--
Loss from operations	(15,275)	(681)
Interest expense	329	402
Interest income	755	1,794
Income (loss) before income taxes	(14,849)	711
Provision (benefit) for income taxes	(3,062)	2,816
Net loss	$ (11,787)	$ (2,105)
Net loss per share:		
Basic and diluted	$ (0.25)	$ (0.06)
Weighted average common shares outstanding:		
Basic and diluted	46,288	36,820

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

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

	Three Months Ended March 31, 2002	Three Months Ended March 31, 2001
Cash flows from operating activities:		
Net loss	$ (11,787)	$ (2,105)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	5,612	4,958
Goodwill impairment charge	---	3,720
Purchase of in-process research and development	6,100	---
Other	62	27
Changes in operating assets and liabilities net of effects of businesses acquired:		
Trade accounts receivable	(10,325)	14,220
Inventories	(1,775)	(875)
Other current assets	5,401	(1,232)
Accrued expenses and other current liabilities	577	(13,155)
Accounts payable	3,344	(3,590)
Net cash provided by (used in) operating activities	(2,791)	1,968
Cash flows from investing activities:		
Purchases of short-term and long-term investments	(37,731)	(8,718)
Maturities and sales of short-term and long-term investments	20,647	3,325
Purchases of property, plant and equipment	(1,335)	(4,898)
Increase in other assets	37	(408)
Purchases of businesses, net of cash acquired	(5,716)	---
Net cash used in investing activities	(24,098)	(10,699)
Cash flows from financing activities:		
Proceeds from short-term borrowings	1,505	11,825
Payments on short-term borrowings	---	(10,988)
Principal payments on long-term debt	(684)	(695)
Proceeds from exercise of stock options	2,610	796
Principal payments under capital lease obligations	(121)	(250)
Net cash provided by financing activities	3,310	688
Effect of exchange rate changes on cash and cash equivalents	(170)	(474)
Decrease in cash and cash equivalents	(23,749)	(8,517)
Cash and cash equivalents at beginning of period	120,869	123,082
Effect of excluded results of ASTeX	---	(3,142)
Cash and cash equivalents at end of period	$ 97,120	$ 111,423
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Interest	$ 129	$ 365
Income taxes	$ 1,517	$ 5,053
Noncash transactions during the period:		
Stock issued for acquisitions	$ 282,341	$ ---

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

1) Basis of Presentation

The interim financial data as of March 31, 2002 and for the three months ended March 31, 2002 and 2001 is unaudited; however, in the opinion of MKS Instruments, Inc., 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 terms "MKS" and the "Company" refer to MKS Instruments, Inc. and its subsidiaries. The unaudited financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all the information and note disclosures required by generally accepted accounting principles. The financial statements should be read in conjunction with the December 31, 2001 audited financial statements and notes thereto included in the MKS Annual Report on Form 10-K filed with the Securities and Exchange Commission on April 1, 2002.

2) Use of Estimates

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States. 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, in-process research and development, merger expenses, intangible assets and goodwill, inventories 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.

3) Recent Accounting Pronouncements

In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" ("SFAS 142"), which is effective for fiscal years beginning after December 15, 2001. SFAS 142 requires, among other things, the discontinuance of goodwill amortization. In addition, the standard includes provisions upon adoption for the reclassification of certain existing recognized intangibles such as goodwill, reassessment of the useful lives of existing recognized intangibles, reclassification of certain intangibles out of previously reported goodwill and the testing for impairment of existing goodwill and other intangibles. The impairment review will involve a two-step process as follows:

> Step 1 -- The Company will compare the fair value of its reporting units to the carrying value, including goodwill, of each of those units. For each reporting unit where the carrying value, including goodwill, exceeds the unit's fair value, the Company will move on to step 2. If a unit's fair value exceeds the carrying value, no further work is performed and no impairment charge will be necessary.
>
> Step 2 -- The Company will perform an allocation of the fair value of the reporting unit to its identifiable tangible and non-goodwill intangible assets and liabilities. This will derive an implied fair value for the reporting unit's goodwill. The Company will then compare the implied fair value of the reporting unit's goodwill with the carrying amount of the reporting unit's goodwill. If the carrying amount of the reporting unit's goodwill is greater than the implied fair value of its goodwill, an impairment loss must be recognized for the excess.

The Company is currently in the process of performing the transitional impairment test of its goodwill and expects to complete this review by the end of the second quarter of 2002.

(Tables in thousands, except per share data)

In accordance with SFAS 142, the Company ceased amortizing goodwill on January 1, 2002 and reassessed the classification of its goodwill and other intangible assets. This analysis, which was completed during the quarter ended March 31, 2002, resulted in the reclassification of $2,023,000 of workforce intangibles to goodwill. Also, in accordance with this statement, the Company reassessed the useful lives of its amortizable intangible assets and determined that the lives were appropriate.

The following is the pro forma effect on net loss and net loss per share had SFAS No. 142 been in effect for the three months ended March 31, 2001:

	March 31, 2001
Net loss	$ (2,105)
Add back: Impact of goodwill amortization, net of taxes	910
Pro forma net loss	$ (1,195)
Basic and diluted net loss per share	$ (0.06)
Add Back: Impact of goodwill amortization, net of taxes	0.03
Pro forma basic and diluted net loss per share	$ (0.03)

Amortizable intangible assets consist of the following as of March 31, 2002:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
Completed technology	$57,941	$6,119	$51,822	5
Customer relationships	6,803	1,043	5,760	7
Other	9,081	1,853	7,228	6
	$73,825	$9,015	$64,810	5

Amortizable intangible assets consist of the following as of December 31, 2001:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Completed technology	$16,564	$4,402	$12,162
Customer relationships	4,040	851	3,189
Other	8,132	2,311	5,821
	$28,736	$7,564	$21,172

(Tables in thousands, except per share data)

Aggregate amortization expense related to acquired intangibles for the quarter ended March 31, 2002 was $2,205,000. Estimated amortization expense related to acquired intangibles for each of the five succeeding fiscal years is as follows:

Year	Amount
2002	$12,801
2003	12,664
2004	12,340
2005	11,439
2006	9,338

4) Cash and Cash Equivalents and Investments

Cash and Cash equivalents consist of the following:

	March 31, 2002	December 31, 2001
Cash and Money Market Instruments	$ 41,620	$ 101,045
Commercial Paper	37,667	8,094
Federal Government and Government Agency Obligations	10,047	11,730
State and Municipal Government Obligations	2,789	---
Corporate Obligations	4,997	---
	$ 97,120	$ 120,869

Short-term available-for-sale investments at market value maturing within one year consist of the following:

	March 31, 2002	December 31, 2001
Federal Government and Government Agency Obligations	$ 29,757	$ 5,442
State and Municipal Government Obligations	1,337	3,100
Corporate Obligations	588	---
Commercial Paper	---	8,083
	$ 31,682	$ 16,625

Long-term available-for-sale investments at market value with maturities of 1 to 5 years consist of the following:

	March 31, 2002	December 31, 2001
Federal Government and Government Agency Obligations	$ 6,018	$ 1,008
State and Municipal Government Obligations	---	7,021
Corporate Obligations	6,865	3,000
	$ 12,883	$ 11,029

(Tables in thousands, except per share data)

5) Net Loss Per Share

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

	Three Months Ended March 31, 2002	2001
Numerator		
Net loss	$ (11,787)	$ (2,105)
Denominator		
Shares used in net loss per common share - basic and diluted	46,288	36,820
Net loss per common share		
Basic and diluted	$ (0.25)	$ (0.06)

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 months ended March 31, 2002 and 2001 are excluded from the calculation of diluted net income per common share because their inclusion would be anti-dilutive. There were options to purchase approximately 7,548,000 and 5,131,000 shares of the Company's common stock outstanding as of March 31, 2002 and 2001, respectively.

6) Inventories

Inventories consist of the following:

	March 31, 2002	December 31, 2001
Raw material	$ 32,404	$ 21,019
Work in process	19,500	15,362
Finished goods	27,200	20,573
	$ 79,104	$ 56,954

7) Stockholders' Equity

Total comprehensive loss was as follows:

	Three Months Ended March 31, 2002	2001
Net loss	$ (11,787)	$ (2,105)
Other comprehensive loss, net of taxes:		
Changes in value of financial instruments designated as hedges of currency and interest rate exposures	(156)	758
Foreign currency translation adjustment	(340)	(606)
Unrealized loss on investments	(55)	(313)
Other comprehensive loss, net of taxes	(551)	(161)
Total comprehensive loss	$ (12,338)	$ (2,266)

(Tables in thousands, except per share data)

8) Segment Information and Significant Customer

Segment information for the three months ended March 31, 2002 and 2001 was as follows:

		North America	Far East	Europe	Total
Net sales to unaffiliated customers	2002	$39,394	$11,336	$8,337	$59,067
	2001	81,132	17,363	12,393	110,888
Intersegment net sales	2002	10,134	124	337	10,595
	2001	18,392	330	392	19,114
Income (loss) from operations	2002	(17,197)	900	1,022	(15,275)
	2001	(5,012)	1,885	2,446	(681)

The Company had one customer comprising 16% and 23% of net sales for the three months ended March 31, 2002 and 2001, respectively.

9) Commitments and Contingencies

On November 3, 1999, On-Line Technologies Inc., 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 seeks injunctive relief and damages for infringement. Perkin-Elmer, Inc. has filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. The Company believes that the counterclaim is without merit.

On November 30, 2000, ASTeX, which was acquired by the Company 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. The Company is seeking injunctive relief and damages for infringement. Advanced Energy Industries, Inc. has filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. The Company believes that the counterclaim is without merit.

The Company cannot be certain of the outcome of the foregoing litigation, but does plan to assert its claims against other parties and oppose the counterclaims against it vigorously.

The Company is subject to other 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.

10) Acquisitions

On January 31, 2002, MKS completed its acquisition of the ENI Business of Emerson Electric Co. ("ENI"), a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor 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. The acquisition has been accounted for under the purchase method of accounting. The purchase price was approximately $266,310,000 and consisted of approximately 12,000,0000 shares of MKS common stock valued at approximately $261,264,000 and transaction expenses of approximately $5,046,000. The value of MKS common stock was approximately $21.7720 per share based on the average closing price of MKS' common stock for the five-day period including the date of the announcement of the signing of the merger agreement and the two days preceding and succeeding such date.

(Tables in thousands, except per share data)

The purchase price was allocated to the assets acquired based upon their estimated fair values and resulted in a preliminary allocation of approximately $203,496,000 to goodwill. The results of operations are included in the Company's consolidated statement of income as of and since the date of the purchase. The preliminary allocation of the purchase price was as follows:

Current assets	$ 31,090
Other assets	21,564
Intangibles subject to amortization	34,600
In-process research and development	6,100
Goodwill	203,496
Other liabilities	(10,801)
Long term liabilities	(19,739)
	$266,310

The amounts allocated to acquired intangibles are being amortized using the straight-line method over their respective estimated useful lives, which range from 6 to 8 years.

In connection with the acquisition of ENI, the Company obtained an appraisal from an independent appraiser of the fair value of its intangible assets. This appraisal valued purchased in-process research and development ("IPR&D") of various projects for the development of new products and technologies at approximately $6,100,000. Because the technological feasibility of products under development had not been established and no future alternative uses existed, the purchased IPR&D was written off during the quarter ended March 31, 2002. The value of the purchased IPR&D was determined using the income approach, which discounts expected future cash flows from projects under development to their net present value. Each project was analyzed to determine the technological innovations included; the utilization of core technology; the complexity, cost and time to complete development; any alternative future use or current technological feasibility; and the stage of completion. The cash flows derived from the IPR&D projects were discounted at rates ranging from 25% to 30%. The Company believes these rates were appropriate given the risks associated with the technologies for which commercial feasibility had not been established. The percentage of completion for each in-process project was determined by identifying the cost incurred to date of the project as a ratio of the total estimated cost required to bring the project to technical and commercial feasibility. The percentage of completion for in-process projects acquired ranged from 65% to 80%, based on management's estimates of tasks completed and the tasks to be completed to bring the projects to technological and commercial feasibility. The projects were generally expected to have durations of up to 12 months. As of March 31, 2002, the actual development timelines and costs were in line with management's estimates.

Development of in-process technology remains a substantial risk to the Company due to a variety of factors including the remaining effort to achieve technical feasibility, rapidly changing customer requirements and competitive threats from other companies and technologies.

On March 13, 2002, MKS completed its acquisition of Tenta Technology Ltd. ("Tenta"), a supplier of modular, computer-based process control systems that are designed for 300mm semiconductor process tool applications. The reasons for the acquisition of Tenta 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. The acquisition has been accounted for under the purchase method of accounting. The purchase price was allocated to the net assets acquired based upon their estimated fair values. The purchase price allocation is preliminary and dependent on the completion of the acquired intangibles valuation report. The results of operations are included in the Company's consolidated statement of income as of and since the date of the purchase.

(Continued) (Tables in thousands, except per share data)

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

	Three months ended March 31, 2002	Three months ended March 31, 2001
Net sales	$ 63,207	$ 150,667
Net income (loss)	$ (7,087)	$ 2,939
Net income (loss) per share:		
Basic	$ (0.14)	$ 0.06
Diluted	$ (0.14)	$ 0.06

The unaudited pro forma results for the three months ended March 31, 2002 excludes approximately $1.3 million of non-recurring charges directly related to the transaction that were incurred by Tenta prior to the date of the acquisition. Additionally, the charge for purchased IPR&D was not included in the unaudited pro forma results, because it was non-recurring and directly related to the transaction.

These unaudited pro forma results have been prepared for comparative purposes only and do not purport to be indicative of the results of operations which actually would have resulted had the acquisition occurred at the beginning of the period, or which may result in the future.

11) Subsequent Event

On April 5, 2002, the Company completed its acquisition of privately held IPC Fab Automation GmbH, a developer and provider of web-based hardware and software that enable e-diagnostics and advanced process control for advanced manufacturing customers.

ITEM 2.

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, including this Management's Discussion and Analysis, the words "believes," "anticipates," "plans," "expects," 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. MKS Instruments, Inc. assumes no obligation to update this information. Risks and uncertainties include, but are not limited to, those discussed in the section entitled "Factors That May Affect Future Results."

OVERVIEW

MKS develops, manufactures and supplies instruments, components and integrated subsystems used to measure, control and monitor critical parameters of semiconductor manufacturing and similar industrial manufacturing processes. The Company estimates that during 2001 approximately 64% of its net sales were to semiconductor capital equipment manufacturers and semiconductor device manufacturers.

On January 31, 2002, MKS completed its acquisition of the ENI Business of Emerson Electric Co. ("ENI"), a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor 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. The acquisition has been accounted for under the purchase method of accounting. The purchase price was approximately $266,310,000 and consisted of approximately 12,000,0000 shares of MKS common stock valued at approximately $261,264,000 and transaction expenses of approximately $5,046,000. The value of MKS common stock was approximately $21.7720 per share based on the average closing price of MKS' common stock for the five-day period including the date of the announcement of the signing of the merger agreement and the two days preceding and succeeding such date. The purchase price was allocated to the assets acquired based upon their estimated fair values and resulted in a preliminary allocation of approximately $203,496,000 to goodwill. The results of operations are included in the Company's consolidated statement of income as of and since the date of the 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 MKS' consolidated statement of income data.

	Three months ended March 31, 2002	Three months ended March 31, 2001
Net sales	100.0%	100.0%
Cost of sales	67.5	61.0
Gross profit	32.5	39.0
Research and development	15.5	10.1
Selling, general and administrative	28.9	17.2
Amortization of goodwill and acquired intangible assets	3.7	2.0
Goodwill impairment charge	--	3.4
Merger expenses	--	6.9
In-process research and development	10.3	--
Loss from operations	(25.9)	(0.6)
Interest income, net	0.7	1.2
Income (loss) before income taxes	(25.2)	0.6
Provision (benefit) for income taxes	(5.2)	2.5
Net loss	(20.0)%	(1.9)%

Net Sales. Net sales decreased 46.7% to $59.1 million for the three months ended March 31, 2002 from $110.9 million for the three months ended March 31, 2001. International net sales were approximately $19.7 million for the three months ended March 31, 2002 or 33.3% of net sales and $29.8 million for the same period of 2001 or 26.8% of net sales. The decrease in net sales is due to a worldwide slowdown in demand for semiconductors during 2001 and continuing through the first quarter of 2002, which resulted in a decline in demand for the Company's products from the Company's semiconductor capital equipment manufacturers and semiconductor device manufacturer customers.

Gross Profit. Gross profit as a percentage of net sales decreased to 32.5% for the three months ended March 31, 2002 from 39.0% for the three months ended March 31, 2001. The decrease was primarily due to lower absorption of manufacturing overhead costs.

Research and Development. Research and development expense decreased 18.1% to $9.1 million or 15.5% of net sales for the three months ended March 31, 2002 from $11.2 million or 10.1% of net sales for the three months ended March 31, 2001. The decrease was primarily due to decreased compensation expense of $1.2 million and decreased expenses for project materials related to projects in process of $0.6 million.

Selling, General and Administrative. Selling, general and administrative expenses decreased 10.5% to $17.1 million or 28.9% of net sales for the three months ended March 31, 2002 from $19.1 million or 17.2% of net sales for the three months ended March 31, 2001. The decrease was due primarily to decreased compensation expense of $1.2 million and decreased purchased services of $0.4 million.

Amortization of Goodwill and Acquired Intangible Assets. Amortization expense of $2.2 million for the three months ended March 31, 2002 represents the amortization of the identifiable intangibles resulting from the acquisitions completed by MKS. In accordance with SFAS No. 142, the Company ceased to amortize goodwill on January 1, 2002. Amortization of goodwill was $1.1 million and amortization of the identifiable intangibles was $1.1 million for the three months ended March 31, 2001.

Purchase of In-process Technology. In January 2002, the Company acquired ENI in a transaction accounted for as a purchase. The purchase price was allocated to the assets acquired, including intangible assets, based on their estimated fair values. The intangible assets include approximately $6.1 million for acquired in-process technology for projects, generally expected to have durations of 12 months, that did not have future alternative uses. The value of the purchased in-process technology was determined using the income approach, which discounts expected future cash flows from projects under development to their net present value. Each project was analyzed to determine the technological innovations included; the utilization of core technology; the complexity, cost and time to complete development; any alternative future use or current technological feasibility; and the stage of completion. The cash flows derived from the in-process technology projects were discounted at rates ranging from 25% to 30%. The Company believes these rates were appropriate given the risks associated with the technologies for which commercial feasibility had not been established. The percentage of completion for each in-process project was determined by identifying the cost incurred to date of the project as a ratio of the total cost required to bring the project to technical and commercial feasibility. The percentage completion for in-process projects acquired ranged from 65% to 80% complete, based on management's estimates of tasks completed and the tasks to be completed to bring the projects to technological and commercial feasibility. At the date of the acquisition, the development of these projects had not yet reached technological feasibility, and the technology in progress had no alternative future uses. Accordingly, these costs were expensed in the first quarter of 2002.

Interest Income (Expense), Net. During the three months ended March 31, 2002, the Company generated net interest income of $0.4 million primarily from the invested net proceeds of its common stock offerings, offset by interest expense on outstanding debt.

Provision (Benefit) for Income Taxes. The effective tax rates for the three months ended March 31, 2002 and 2001 were 20.6% and 396.1%, respectively, resulting in a benefit for income taxes of $3.1 million and provision for income taxes of $2.8 million, respectively. The effective tax rates for the three months ended March 31, 2002 and 2001 differed from the statutory rate of 35% due primarily to non-deductible charges associated with acquisitions made in 2002 and 2001.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations and capital requirements through a combination of cash provided by operations, long-term real estate financing, capital lease financing and short-term lines of credit.

Operations used cash of $2.8 million for the three months ended March 31, 2002. The cash flow from operations in the first quarter of 2002 was impacted by the net loss of $11.8, increases in accounts receivable and inventories of $10.3 million and $1.8 million, respectively, and offset by non-cash charges for in-process research and development of $6.1 million, depreciation and amortization of $5.6 million, and an increase in accounts payable of $3.3 million. Investing activities utilized cash of $24.1 million for the three months ended March 31, 2002 primarily from purchases of investments. Financing activities provided cash of $3.3 million, primarily from proceeds from employees exercising stock options.

Working capital was $224.1 million as of March 31, 2002, an increase of $7.2 million from December 31, 2001. The increase in working capital was primarily due to increased trade accounts receivable. MKS entered into a credit agreement on July 31, 2001 whereby the Company has a combined $40.0 million line of credit with two banks. The credit agreement expires on July 31, 2002. The line of credit is collateralized by the Company's domestic accounts receivable and domestic inventory for borrowings exceeding $5.0 million. There were no borrowings under this line of credit as of March 31, 2002.

The Company believes that its working capital, together with the cash anticipated to be generated from operations and funds available from existing credit facilities, will be sufficient to satisfy its estimated working capital and planned capital expenditure requirements through at least the next 12 months.

FACTORS THAT MAY AFFECT FUTURE RESULTS

MKS believes that this document contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties and are based on the beliefs and assumptions of management of MKS, based on information currently available to MKS' management. Use of words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "should," "likely" or similar expressions, indicate a forward-looking statement. Forward-looking statements involve risks, uncertainties and assumptions. Certain of the information contained in this Quarterly Report on Form 10-Q consists of forward-looking statements. Important factors that could cause actual results to differ materially from the forward-looking statements include the following:

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

MKS estimates that approximately 64% of its sales during 2001 were to semiconductor capital equipment manufacturers and semiconductor device manufacturers, and it expects that sales to such customers will continue to account for a substantial majority of its sales. MKS' 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 MKS' 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. For example, in 1996 and 1998, the semiconductor capital equipment industry experienced significant declines, which caused a number of MKS' customers to reduce their orders. More recently, in 2001 and continuing through the first quarter of 2002, MKS experienced a significant reduction in demand from OEM customers, and lower gross margins due to reduced absorption of manufacturing overhead at the lower revenue levels. MKS incurred special charges for excess and obsolete inventory of $14.0 million in the fourth quarter of 2001 and $2.6 million in the second quarter of 2001. The charges were significantly higher than normal and were primarily caused by a significant reduction in demand including reduced demand for older technology products. 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. MKS cannot be certain that semiconductor downturns will not 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 MKS' business, financial condition and results of operations.

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

A substantial portion of MKS' shipments occur shortly after an order is received and therefore MKS operates with a low level of backlog. As a result, a decrease in demand for MKS' products from one or more customers could occur with limited advance notice and could have a material adverse effect on MKS' results of operations in any particular period. A significant percentage of MKS' 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 MKS' results of operations. Factors that could cause fluctuations in MKS' 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, MKS was in the process of increasing its production capacity when the semiconductor capital equipment market began to experience a significant downturn in 1996. This downturn had a material adverse effect on MKS' operating results in the second half of 1996 and the first half of 1997. After an increase in business in the latter half of 1997, the market experienced another downturn in 1998, which had a material adverse effect on MKS' 1998 and first quarter 1999 operating results. More recently, the semiconductor capital equipment market experienced a significant downturn during 2001 and continuing through the first quarter of 2002. As a result, MKS experienced a reduction in demand from OEM customers in 2001 and the first quarter of 2002, which has had a material adverse effect on MKS' operating results. During 2001 gross margins were negatively affected by special charges for excess and obsolete inventory of $14.0 million in the fourth quarter of 2001 and $2.6 million in the second quarter of 2001. The charges were significantly higher than normal and 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 MKS will in the future experience quarterly or annual fluctuations and that, in one or more future quarters, its operating results will fall below the expectations of public market analysts or investors. In any such event, the price of MKS' common stock could decline significantly.

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

MKS' top ten customers accounted for approximately 39% of its net sales in 2001, 52% of its net sales in 2000 and 46% of its net sales in 1999. 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 MKS' business, financial condition and results of operations. During 2001 and 2000, one customer, Applied Materials, accounted for approximately 18% and 30%, respectively, of MKS' net sales. None of MKS' significant customers, including Applied Materials, has entered into an agreement requiring it to purchase any minimum quantity of MKS' products. The demand for MKS' products from its 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. MKS' future success will continue to depend upon:

- its ability to maintain relationships with existing key customers;
- its ability to attract new customers; and
- the success of its customers in creating demand for their capital equipment products which incorporate MKS' products.

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

MKS acquired Compact Instrument Technology, LLC ("Compact Instrument") in March 2000, Telvac Engineering, Ltd. ("Telvac") in May 2000, Spectra Instruments, LLC ("Spectra") in July 2000, D.I.P., Inc. ("D.I.P.") in September 2000, Applied Science and Technology, Inc. ("ASTeX") in January 2001, On-Line Technologies, Inc. ("On-Line") in April 2001, the ENI Business ("ENI") of Emerson Electric Co. in January 2002, Tenta Technologies Ltd. ("Tenta") in March 2002, and IPC Fab Automation GmbH ("IPC") in April 2002. As a part of its business strategy, MKS 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 MKS' ongoing business and distraction of management, expenses related to the acquisition and potential unknown liabilities associated with acquired businesses.

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

In addition, with future acquisitions, MKS could use substantial portions of its available cash as all or a portion of the purchase price. MKS could also issue additional securities as consideration for these acquisitions, which could cause significant stockholder dilution. MKS' acquisitions of Compact Instrument, Telvac, Spectra, D.I.P., ASTeX, On-Line, ENI, Tenta, and IPC and any future acquisitions may not ultimately help MKS achieve its strategic goals and may pose other risks to MKS.

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

The markets for MKS' products are highly competitive. Its competitive success often depends upon factors outside of its 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, MKS' success will depend in part on its ability to have semiconductor device manufacturers specify that MKS' products be used at their semiconductor fabrication facilities. In addition, MKS may encounter difficulties in changing established relationships of competitors that already have a large installed base of products within such semiconductor fabrication facilities.

IF MKS' PRODUCTS ARE NOT DESIGNED INTO SUCCESSIVE NEW GENERATIONS OF ITS CUSTOMERS' PRODUCTS, MKS 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. MKS' success depends on its products being designed into new generations of equipment for the semiconductor industry. MKS 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 MKS products are not chosen by its customers, MKS' net sales may be reduced during the lifespan of its customers' products. In addition, MKS must make a significant capital investment to develop products for its customers well before its products are introduced and before it can be sure that it will recover its capital investment through sales to the customers in significant volume. MKS is thus also at risk during the development phase that its products may fail to meet its customers' technical or cost requirements and may be replaced by a competitive product or alternative technology solution. If that happens, MKS may be unable to recover MKS' development costs.

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

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

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

International sales, which include sales by MKS' foreign subsidiaries, but exclude direct export sales (which were less than 10% of MKS' total net sales), accounted for approximately 31% of net sales in 2001, 23% of net sales in 2000 and 25% of net sales in 1999.

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

RISKS RELATING TO MKS' INTERNATIONAL OPERATIONS COULD ADVERSELY AFFECT MKS' OPERATING RESULTS.

MKS has substantial international sales, service, and manufacturing operations in Europe and Asia, which exposes MKS to foreign operational and political risks that may harm MKS' business. MKS' international operations are subject to inherent risks, which may adversely affect MKS, 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;
- 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 MKS TO RAISE PRICES WHICH COULD RESULT IN REDUCED SALES.

Currency exchange rate fluctuations could have an adverse effect on MKS' net sales and results of operations and MKS could experience losses with respect to its hedging activities. Unfavorable currency fluctuations could require MKS to increase prices to foreign customers which could result in lower net sales by MKS to such customers. Alternatively, if MKS does not adjust the prices for its products in response to unfavorable currency fluctuations, its results of operations could be adversely affected. In addition, sales made by MKS' 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. MKS enters into forward exchange contracts and local currency purchased options to reduce currency exposure arising from intercompany sales of inventory. However, MKS cannot be certain that its efforts will be adequate to protect it against significant currency fluctuations or that such efforts will not expose it to additional exchange rate risks.

KEY PERSONNEL MAY BE DIFFICULT TO ATTRACT AND RETAIN.

MKS' 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 MKS' business, financial condition and results of operations. MKS believes that its future success will depend in part on its ability to attract and retain highly skilled technical, financial, managerial and marketing personnel. MKS cannot be certain that it will be successful in attracting and retaining such personnel.

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

As of March 31, 2002, MKS owned 125 U.S. patents and 84 foreign patents and had 59 pending U.S. patent applications and 137 pending foreign patent applications. Although MKS seeks to protect its intellectual property rights through patents, copyrights, trade secrets and other measures, it cannot be certain that:

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

PROTECTION OF MKS' INTELLECTUAL PROPERTY RIGHTS MAY RESULT IN COSTLY LITIGATION.

Litigation may be necessary in order to enforce MKS' patents, copyrights or other intellectual property rights, to protect its trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. For example, on November 30, 2000, MKS' ASTeX subsidiary brought suit in federal district court in Delaware against Advanced Energy Industries, Inc. for infringement of ASTeX's patent related to its Astron product. Such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on MKS' business, financial condition and results of operations.

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

The stock market has from time to time experienced, and is likely to continue to experience, extreme price and volume fluctuations. Recently, 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 MKS' common stock has fluctuated greatly since its 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 MKS were the object of securities class action litigation, it could result in substantial costs and a diversion of MKS' management's attention and resources.

MKS' DEPENDENCE ON SOLE AND LIMITED SOURCE SUPPLIERS COULD AFFECT ITS ABILITY TO MANUFACTURE PRODUCTS AND SYSTEMS.

MKS relies on sole and limited source suppliers for a few of its components and subassemblies that are critical to the manufacturing of MKS' 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 its suppliers to develop technologically advanced products to support MKS' growth and development of new systems.

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

MKS IS SUBJECT TO GOVERNMENTAL REGULATIONS.

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

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

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

As of January 31, 2002, John R. Bertucci, president, chairman and chief executive officer of MKS, and certain members of his family, in the aggregate, beneficially owned approximately 29.8% of MKS' 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"), MKS issued approximately 24% of its then outstanding shares of common stock to Emerson. Accordingly, Emerson is able to exert substantial influence over MKS' actions.

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

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 MKS has no present plans to issue any preferred stock, MKS' 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 MKS. The issuance of preferred stock could adversely affect the voting power of the holders of MKS' common stock, including the loss of voting control to others. In addition, MKS' 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 MKS.

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 the Consolidated Financial Statements for year ended December 31, 2001, which was filed on Form 10-K on April 1, 2002. MKS enters into local currency purchased options and forward exchange contracts to reduce currency exposure arising from intercompany sales of inventory. The potential fair value loss for a hypothetical 10% adverse change in currency exchange rates on MKS' local currency purchased options at March 31, 2002 would be approximately $ 300,000. The potential loss was estimated by calculating the fair value of the local currency purchased options at March 31, 2002 and comparing that with those calculated using the hypothetical currency exchange rates. The potential fair value loss for a hypothetical 10% adverse change in the forward currency exchange rate on MKS' forward exchange contracts at March 31, 2002 would be $458,000. The potential loss was estimated by calculation the fair value of the forward exchange contacts at March 31, 2002 and comparing that with those calculated using the hypothetical forward currency exchange rate. There were no other material changes in MKS' exposure to market risk from December 31, 2001.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

There have been no material developments since the filing of MKS' Annual Report on Form 10-K on April 1, 2002.

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS

(c) Recent Sales of Unregistered Securities.

On January 31, 2002, MKS issued 12,000,000 shares of its common stock to Emerson Electric Co., the former stockholder of the ENI Business, in connection with its acquisition of the ENI Business. The shares of common stock were exempt from registration under Section 4(2) of the Securities Act of 1933, as amended, because there was no public offering of the common stock issued. No underwriters were involved in the sale of these securities.

On March 13, 2002, MKS issued an aggregate of 700,000 shares of its common stock to the former stockholders of Tenta Technology Ltd. ("Tenta") in connection with its acquisition of Tenta. Of the 700,000 shares issued, 337,780 shares of common stock were exempt from registration under Regulation D of the Securities Act of 1933, as amended and 362,220 shares of common stock were exempt from registration under Regulation S of the Securities Act of 1933, as amended. No underwriters were involved in the sale of these securities.

(d) Use of Proceeds from Sales of Registered Securities. The Company has previously provided information on Form 10-Q for the quarter ended September 30, 2000 relating to the use of proceeds from the sale of securities by the Company pursuant to the Registration Statement on Form S-1 (Reg. No. 333-71363) that was declared effective by the Securities and Exchange Commission on March 29, 1999. As of March 31, 2002, approximately $20.8 million of the net proceeds from the securities sold has been used to acquire businesses. There has been no other change to the information previously provided.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

Exhibit No.	Exhibit Description
10.1.1	Fourth Amendment to Amended and Restated 1995 Stock Incentive Plan of MKS Instruments, Inc.
10.1.2	Fifth Amendment to Amended and Restated 1995 Stock Incentive Plan of MKS, Inc.

(b) Reports on Form 8-K

The Company filed a Current Report on Form 8-K on February 12, 2002 and Amendment No. 1 to such Current Report on Form 8-K on April 15, 2002 to report that the Company had completed its acquisition of the ENI Business of Emerson Electric Co. and to provide the financial statements and the pro forma financial information required.

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.

May 15, 2002

By: /s/ Ronald C. Weigner
Ronald C. Weigner
Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT INDEX

Exhibit No.	Exhibit Description
10.1.1	Fourth Amendment to Amended and Restated 1995 Stock Incentive Plan of MKS Instruments, Inc.
10.1.2	Fifth Amendment to Amended and Restated 1995 Stock Incentive Plan of MKS, Inc.

Exhibit 10.1.1

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

The Amended and Restated 1995 Stock Incentive Plan, as amended be and hereby is amended as follows:

by deleting the first sentence of Section 4(a) thereof in its entirety and inserting in lieu thereof the following:

"Effective January 1, 2002 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: (i) shall annually increase by 5% of the total shares of the Company's outstanding Common Stock on January 1 of each year; and (ii) in the event of an increase in the total shares of the Company's Common Stock after January 1 of any such year in connection with the acquisition of any corporation, partnership or other business entity by the Company (whether by merger, stock purchase or otherwise), shall increase by 5% of such increased amount. Such increases 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, subject to adjustment under Section 4(c)."

Adopted by the Board of Directors on January 23, 2002.

Exhibit 10.1.2

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

The Amended and Restated 1995 Stock Incentive Plan, as amended be and hereby is amended as follows:

by deleting the first sentence of Section 4(b) thereof in its entirety and inserting in lieu thereof the following:

"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 Awards may be granted to any Participant under the Plan shall be 900,000 per calendar year."

Adopted by the Board of Directors on April 23, 2002.