
**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 March 31, 2012

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.)

2 Tech Drive, Suite 201, Andover, Massachusetts
(Address of principal executive offices)

01810
(Zip Code)

Registrant's telephone number, including area code (978) 645-5500

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 has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

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

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

As of May 2, 2012, the registrant had 52,537,261 shares of common stock outstanding.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

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

	<u>March 31, 2012</u>	<u>December 31, 2011</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 345,673	\$ 312,916
Short-term investments	223,772	252,603
Trade accounts receivable, net	131,132	120,894
Inventories	148,474	153,632
Deferred income taxes	10,080	10,618
Other current assets	24,978	34,238
Total current assets	<u>884,109</u>	<u>884,901</u>
Property, plant and equipment, net	73,994	72,487
Long-term investments	16,481	7,873
Goodwill	140,084	140,084
Intangible assets, net	1,150	1,043
Other assets	11,915	12,266
Total assets	<u>\$ 1,127,733</u>	<u>\$ 1,118,654</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings	\$ 368	\$ 1,932
Accounts payable	22,583	24,853
Accrued compensation	21,210	21,774
Income taxes payable	5,395	7,548
Other current liabilities	37,923	40,324
Total current liabilities	<u>87,479</u>	<u>96,431</u>
Other liabilities	34,212	32,211
Commitments and contingencies (Note 14)		
Stockholders' equity:		
Preferred Stock, \$0.01 par value per share, 2,000,000 shares authorized; none issued and outstanding	—	—
Common Stock, no par value, 200,000,000 shares authorized; 52,528,749 and 52,491,948 shares issued and outstanding at March 31, 2012 and December 31, 2011, respectively	113	113
Additional paid-in capital	709,707	707,419
Retained earnings	281,711	268,870
Accumulated other comprehensive income	14,511	13,610
Total stockholders' equity	<u>1,006,042</u>	<u>990,012</u>
Total liabilities and stockholders' equity	<u>\$ 1,127,733</u>	<u>\$ 1,118,654</u>

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

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

	Three Months Ended March 31,	
	2012	2011
Net revenues:		
Products	\$ 164,488	\$ 207,447
Services	26,380	24,404
Total net revenues	<u>190,868</u>	<u>231,851</u>
Cost of revenues:		
Cost of products	91,024	111,215
Cost of services	16,053	14,275
Total cost of revenues	<u>107,077</u>	<u>125,490</u>
Gross profit	83,791	106,361
Research and development	16,184	16,896
Selling, general and administrative	34,119	32,707
Amortization of intangible assets	119	250
Income from operations	33,369	56,508
Interest income	261	276
Interest expense	9	5
Income before income taxes	33,621	56,779
Provision for income taxes	10,853	18,736
Net income	<u>22,768</u>	<u>38,043</u>
Other comprehensive income:		
Changes in value of financial instruments designated as cash flow hedges, net of tax expense of \$413 and \$233 for the three months ended March 31, 2012 and 2011, respectively	641	394
Foreign currency translation adjustments, net of tax of \$0 for the three months ended March 31, 2012 and 2011, respectively	301	3,124
Unrealized (loss) gain on investments, net of tax (benefit) expense of \$(27) and \$28 for the three months ended March 31, 2012 and 2011, respectively	(41)	48
Total comprehensive income	<u>\$ 23,669</u>	<u>\$ 41,609</u>
Net income per share:		
Basic	<u>\$ 0.43</u>	<u>\$ 0.74</u>
Diluted	<u>\$ 0.43</u>	<u>\$ 0.73</u>
Cash dividends paid per common share	<u>\$ 0.15</u>	<u>\$ 0.15</u>
Weighted average common shares outstanding:		
Basic	<u>52,504</u>	<u>51,407</u>
Diluted	<u>53,222</u>	<u>52,386</u>

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,	
	2012	2011
Cash flows from operating activities:		
Net income	\$ 22,768	\$ 38,043
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	3,143	3,177
Stock-based compensation	3,300	3,092
Provision for excess and obsolete inventory	4,263	3,066
Deferred income taxes	1,032	2,993
Excess tax benefits from stock-based compensation	(657)	(5,032)
Other	532	(289)
Changes in operating assets and liabilities:		
Trade accounts receivable	(12,217)	(16,838)
Inventories	578	(5,984)
Income taxes	3,648	12,161
Other current assets	3,519	(1,048)
Accrued compensation and other liabilities	(187)	(4,847)
Accounts payable	(2,289)	(1,726)
Net cash provided by operating activities	<u>27,433</u>	<u>26,768</u>
Cash flows from investing activities:		
Purchases of investments	(101,257)	(103,721)
Maturities and sales of investments	121,414	152,514
Purchases of property, plant and equipment	(4,567)	(2,331)
Other	(146)	(31)
Net cash provided by investing activities	<u>15,444</u>	<u>46,431</u>
Cash flows from financing activities:		
Proceeds from short-term borrowings	2,896	2,988
Payments on short-term borrowings	(4,401)	(1,462)
Repurchase of common stock	(3,721)	—
Net proceeds related to employee stock awards	19	22,672
Dividend payments to common stockholders	(7,877)	(7,763)
Excess tax benefit from stock-based compensation	657	5,032
Net cash (used in) provided by financing activities	<u>(12,427)</u>	<u>21,467</u>
Effect of exchange rate changes on cash and cash equivalents	<u>2,307</u>	<u>2,065</u>
Increase in cash and cash equivalents	32,757	96,731
Cash and cash equivalents at beginning of period	312,916	162,476
Cash and cash equivalents at end of period	<u>\$ 345,673</u>	<u>\$ 259,207</u>

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

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and 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 March 31, 2012 and for the three months ended March 31, 2012 and 2011 are 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 consolidated balance sheet presented as of December 31, 2011 has been derived from the audited consolidated financial statements as of that date. The unaudited consolidated 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 United States generally accepted accounting principles (“U.S. GAAP”). The consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the MKS Annual Report on Form 10-K for the year ended December 31, 2011 filed with the Securities and Exchange Commission on February 24, 2012.

The preparation of these consolidated 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 consolidated 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, stock-based compensation, inventory, intangible assets, goodwill and other long-lived assets, acquisition expenses, income taxes 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) Recently Issued Accounting Pronouncements

In September 2011, the Financial Accounting Standards Board (“FASB”) issued an Accounting Standards Update (“ASU”) which simplifies how companies test goodwill for impairment. Under these amendments, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. However, if an entity concludes otherwise, then it is required to perform the first step of the two-step impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit, as described in the goodwill accounting standard. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption was permitted. The Company adopted this new ASU in the fourth quarter of 2011. This new ASU did not have a material effect on the Company’s consolidated financial statements.

In June 2011, the FASB issued an ASU which eliminates the option to present the components of other comprehensive income as part of the statement of equity and requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments were effective retrospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. The ASU requires changes in presentation only. The Company adopted this new ASU in the first quarter of 2012, electing to present the components of other comprehensive income as one continuous statement. The new ASU did not have a material effect on the Company’s consolidated financial statements.

In May 2011, the FASB issued an ASU which applies to all reporting entities that are required or permitted to measure or disclose the fair value of an asset, a liability, or an instrument classified in a reporting entity’s shareholders’ equity in the financial statements. The amendments do not extend the use of fair value accounting, but provide guidance on how it should be applied where its use is already required or permitted by other standards within U.S. GAAP. The amendments change the wording used to describe many requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. Additionally, the ASU clarifies the FASB’s intent about the application of existing fair value measurements. The amendments in this ASU are to be applied prospectively. For public entities, the amendments were effective during interim and annual periods beginning after December 15, 2011. The Company adopted the new ASU in the first quarter of 2012. The new ASU did not have a material effect on the Company’s consolidated financial statements.

MKS INSTRUMENTS, INC.
 NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
 (in thousands, except share and per share data)

3) Investments

The fair value of short-term investments with maturities or estimated lives of less than one year consists of the following:

	March 31, 2012	December 31, 2011
Available-for-sale investments:		
Time deposits	\$ 38	\$ 37
Bankers acceptance drafts	364	962
U.S. treasury obligations	17,067	29,404
U.S. agency obligations	205,537	221,565
	<u>223,006</u>	<u>251,968</u>
Trading investments:		
Mutual funds	766	635
	<u>\$ 223,772</u>	<u>\$ 252,603</u>

The fair value of long-term available-for-sale investments with maturities of more than one year consists of the following:

	March 31, 2012	December 31, 2011
U.S. agency obligations	<u>\$ 16,481</u>	<u>\$ 7,873</u>

The following tables show the gross unrealized gains and (losses) aggregated by investment category for short-term and long-term available-for-sale investments:

	Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Estimated Fair Value
As of March 31, 2012:				
Short-term investments:				
Time deposits	\$ 38	\$ —	\$ —	\$ 38
Bankers acceptance drafts	364	—	—	364
U.S. treasury obligations	17,065	2	—	17,067
U.S. agency obligations	205,544	34	(41)	205,537
	<u>\$223,011</u>	<u>\$ 36</u>	<u>\$ (41)</u>	<u>\$223,006</u>

Long-term investments:				
U.S. agency obligations	<u>\$ 16,477</u>	<u>\$ 4</u>	<u>\$ —</u>	<u>\$ 16,481</u>

	Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Estimated Fair Value
As of December 31, 2011:				
Short-term investments:				
Time deposits	\$ 37	\$ —	\$ —	\$ 37
Bankers acceptance drafts	962	—	—	962
U.S. treasury obligations	29,393	11	—	29,404
U.S. agency obligations	221,516	56	(7)	221,565
	<u>\$251,908</u>	<u>\$ 67</u>	<u>\$ (7)</u>	<u>\$251,968</u>

Long-term investments:				
U.S. agency obligations	<u>\$ 7,876</u>	<u>\$ —</u>	<u>\$ (3)</u>	<u>\$ 7,873</u>

Interest income is accrued as earned. Dividend income is recognized as income on the date the stock trades “ex-dividend.” The cost of marketable securities sold is determined by the specific identification method and realized gains or losses are reflected in income and were not material for the three months ended March 31, 2012 and 2011, respectively.

The unrealized gains and losses for trading investments were immaterial for the three months ended March 31, 2012. The Company did not have trading securities as of March 31, 2011.

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

4) Fair Value Measurements

In accordance with the provisions of fair value accounting, a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability and defines fair value based upon an exit price model.

The fair value measurement guidance establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The guidance describes three levels of inputs that may be used to measure fair value:

- Level 1 Quoted prices in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments or securities or derivative contracts that are valued using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, we categorize such assets and liabilities based on the lowest level input that is significant to the fair value measurement in its entirety. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset.

MKS INSTRUMENTS, INC.
 NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
 (in thousands, except share and per share data)

Assets and liabilities of the Company measured at fair value on a recurring basis as of March 31, 2012, are summarized as follows:

Description	March 31, 2012	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents:				
Money market funds	\$ 131,668	\$ 131,668	\$ —	\$ —
Trading securities:				
Mutual funds	766	766	—	—
Available-for-sale securities:				
Bankers acceptance drafts	364	—	364	—
U.S. treasury obligations	17,067	—	17,067	—
U.S. agency obligations	222,018	175,768	46,250	—
Derivatives – currency forward contracts	981	—	981	—
Total assets	<u>\$ 372,864</u>	<u>\$ 308,202</u>	<u>\$ 64,662</u>	<u>\$ —</u>
Liabilities:				
Derivatives – currency forward contracts	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 449</u>	<u>\$ —</u>
Reported as follows:				
Assets:				
Cash and cash equivalents (1)	\$ 131,668	\$ 131,668	\$ —	\$ —
Short-term investments (2)	223,734	165,059	58,675	—
Other current assets	981	—	981	—
Total current assets	<u>\$ 356,383</u>	<u>\$ 296,727</u>	<u>\$ 59,656</u>	<u>\$ —</u>
Long-term investments	<u>\$ 16,481</u>	<u>\$ 11,475</u>	<u>\$ 5,006</u>	<u>\$ —</u>
Liabilities:				
Other current liabilities	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 449</u>	<u>\$ —</u>

- (1) The cash and cash equivalent amounts presented in the table above do not include cash of \$177,615 and non-negotiable time deposits of \$36,390 as of March 31, 2012.
- (2) The short-term investments presented in the table above do not include non-negotiable time deposits of \$38 as of March 31, 2012.

MKS INSTRUMENTS, INC.
 NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
 (in thousands, except share and per share data)

Description	December 31, 2011	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents:				
Money market funds	\$ 137,976	\$ 137,976	\$ —	\$ —
Trading securities:				
Mutual funds	635	635	—	—
Available-for-sale securities:				
Bankers acceptance drafts	962	—	962	—
U.S. treasury obligations	29,404	—	29,404	—
U.S. agency obligations	229,438	147,546	81,892	—
Derivatives – currency forward contracts	531	—	531	—
Total assets	\$ 398,946	\$ 286,157	\$ 112,789	\$ —
Liabilities:				
Derivatives – currency forward contracts	<u>\$ 1,054</u>	<u>\$ —</u>	<u>\$ 1,054</u>	<u>\$ —</u>
Reported as follows:				
Assets:				
Cash and cash equivalents (1)	\$ 137,976	\$ 137,976	\$ —	\$ —
Short-term investments (2)	252,566	140,308	112,258	—
Other current assets	531	—	531	—
Total current assets	<u>\$ 391,073</u>	<u>\$ 278,284</u>	<u>\$ 112,789</u>	<u>\$ —</u>
Long-term investments	<u>\$ 7,873</u>	<u>\$ 7,873</u>	<u>\$ —</u>	<u>\$ —</u>
Liabilities:				
Other current liabilities	<u>\$ 1,054</u>	<u>\$ —</u>	<u>\$ 1,054</u>	<u>\$ —</u>

- (1) The cash and cash equivalent amounts presented in the table above do not include cash of \$146,035 and non-negotiable time deposits of \$28,905 as of December 31, 2011.
- (2) The short-term investments presented in the table above do not include non-negotiable time deposits of \$37 as of December 31, 2011.

Money Market Funds

Money market funds are cash and cash equivalents and are classified within Level 1 of the fair value hierarchy.

Trading Mutual Fund Investments

As of March 31, 2012 and December 31, 2011, trading investments consisted of certain U.S. and international equity mutual funds and government agency fixed income mutual funds. During 2011, management changed the designation of the investments from available-for-sale to trading investments.

Available-For-Sale Investments

As of March 31, 2012 and December 31, 2011, available-for-sale investments consisted of time deposits and drafts denominated in the Euro currency, U.S. treasury obligations and U.S. agency obligations. U.S. agency obligations include certain corporate obligations issued under the government's Term Loan Guarantee Program which removed any credit risk associated with the corporate issuing entity, as they become obligations of the U.S. government should the corporate issuer be unable to honor its obligations.

The Company measures its debt and equity investments at fair value. The Company's available-for-sale investments are classified within Level 1 and Level 2 of the fair value hierarchy.

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

Derivatives

As a result of the Company's global operating activities, the Company is exposed to market risks from changes in foreign currency exchange rates, which may adversely affect its operating results and financial position. When deemed appropriate, the Company minimizes its risks from foreign currency exchange rate fluctuations through the use of derivative financial instruments. The principal market in which the Company executes its foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants usually are large commercial banks. The forward foreign currency exchange contracts are valued using broker quotations, or market transactions and are classified within Level 2 of the fair value hierarchy.

5) Derivatives

The Company enters into derivative instruments for risk management purposes only, including derivatives designated as hedging instruments and those utilized as economic hedges. The Company operates internationally and, in the normal course of business, is exposed to fluctuations in interest rates and foreign exchange rates. These fluctuations can increase the costs of financing, investing and operating the business. The Company has used derivative instruments, such as forward contracts, to manage certain foreign currency exposure.

By nature, all financial instruments involve market and credit risks. The Company enters into derivative instruments with major investment grade financial institutions and no collateral is required. The Company has policies to monitor the credit risk of these counterparties. While there can be no assurance, the Company does not anticipate any material non-performance by any of these counterparties.

The Company hedges a portion of its forecasted foreign currency denominated intercompany sales of inventory, over a maximum period of eighteen months, using forward foreign exchange contracts accounted for as cash-flow hedges related to Japanese, South Korean, British and European currencies. To the extent these derivatives are effective in off-setting the variability of the hedged cash flows, and otherwise meet the hedge accounting criteria, changes in the derivatives' fair value are not included in current earnings but are included in other comprehensive income ("OCI") in stockholders' equity. These changes in fair value will subsequently be reclassified into earnings, as applicable, when the forecasted transaction occurs. To the extent that a previously designated hedging transaction is no longer an effective hedge, any ineffectiveness measured in the hedging relationship is recorded currently in earnings in the period it occurs. The cash flows resulting from forward exchange contracts are classified in the consolidated statements of cash flows as part of cash flows from operating activities. The Company does not enter into derivative instruments for trading or speculative purposes.

To the extent the hedge accounting criteria is not met, the related foreign currency forward contracts are considered as economic hedges and changes in the fair value of these contracts are recorded immediately in earnings in the period in which they occur. These include hedges that are used to reduce exchange rate risks arising from the change in fair value of certain foreign currency denominated assets and liabilities (i.e., payables, receivables) and other economic hedges where the hedge accounting criteria were not met.

As of March 31, 2012 and December 31, 2011, the Company had outstanding forward foreign exchange contracts with gross notional values of \$38,612 and \$36,119, respectively. The following tables provide a summary of the primary net hedging positions and corresponding fair values held as of March 31, 2012 and December 31, 2011:

<u>Currency Hedged (Buy/Sell)</u>	<u>March 31, 2012</u>	
	<u>Gross Notional Value</u>	<u>Fair Value (1)</u>
U.S. Dollar/Japanese Yen	\$ 17,754	\$ 859
U.S. Dollar/South Korean Won	14,701	(335)
U.S. Dollar/Euro	3,457	46
U.S. Dollar/U.K. Pound Sterling	2,700	(38)
Total	<u>\$ 38,612</u>	<u>\$ 532</u>

MKS INSTRUMENTS, INC.
 NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
 (in thousands, except share and per share data)

Currency Hedged (Buy/Sell)	December 31, 2011	
	Gross Notional Value	Fair Value (1)
U.S. Dollar/Japanese Yen	\$ 18,676	\$ (961)
U.S. Dollar/South Korean Won	10,799	60
U.S. Dollar/Euro	3,869	288
U.S. Dollar/U.K. Pound Sterling	2,775	90
Total	<u>\$ 36,119</u>	<u>\$ (523)</u>

(1) Represents the net receivable (payable) amount included in the consolidated balance sheets.

The following table provides a summary of the fair value amounts of the Company's derivative instruments:

<u>Derivatives Designated as Hedging Instruments</u>	March 31, 2012	December 31, 2011
Derivative assets:		
Forward exchange contracts	\$ 981	\$ 531
Derivative liabilities:		
Forward exchange contracts	(449)	(1,054)
Total net derivative asset (liability) designated as hedging instruments (1)	<u>\$ 532</u>	<u>\$ (523)</u>

(1) The derivative asset of \$981 and derivative liability of \$449 are classified in other current assets and other current liabilities, respectively, in the consolidated balance sheet as of March 31, 2012. The derivative asset of \$531 and derivative liability of \$1,054 are classified in other current assets and other current liabilities, respectively, in the consolidated balance sheet as of December 31, 2011.

The following table provides a summary of the gains (losses) on derivatives designated as hedging instruments:

<u>Derivatives Designated as Cash Flow Hedging Relationships</u>	Three Months Ended	
	2012	March 31, 2011
Forward exchange contracts:		
Net gain (loss) recognized in OCI (1)	\$ 1,334	\$ (162)
Net loss reclassified from OCI into income (2)	(513)	(526)

(1) Net change in the fair value of the effective portion classified in OCI.

(2) Effective portion classified in selling, general and administrative expenses.

6) Inventories

Inventories consist of the following:

	March 31, 2012	December 31, 2011
Raw material	\$ 80,762	\$ 78,501
Work-in-process	20,106	21,298
Finished goods	47,606	53,833
	<u>\$ 148,474</u>	<u>\$ 153,632</u>

7) Goodwill and Intangible Assets

Goodwill

The Company's methodology for allocating the purchase price relating to purchase acquisitions is determined through established and generally accepted valuation techniques. Goodwill is measured as the excess of the cost of the acquisition over the sum of the amounts assigned to tangible and identifiable intangible assets acquired less liabilities assumed. The Company assigns assets acquired (including goodwill) and liabilities assumed to one or more reporting units as of the date of acquisition. Typically

MKS INSTRUMENTS, INC.
 NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
 (in thousands, except share and per share data)

acquisitions relate to a single reporting unit and thus do not require the allocation of goodwill to multiple reporting units. If the products obtained in an acquisition are assigned to multiple reporting units, the goodwill is distributed to the respective reporting units as part of the purchase price allocation process.

Goodwill and purchased intangible assets with indefinite useful lives are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The process of evaluating the potential impairment of goodwill and intangible assets requires significant judgment. The Company regularly monitors current business conditions and other factors including, but not limited to, adverse industry or economic trends, restructuring actions and lower projections of profitability that may impact future operating results.

As of October 31, 2011, the Company performed its annual impairment assessment of goodwill and determined that there was no impairment.

The changes in the carrying amount of goodwill and accumulated impairment losses during the three months ended March 31, 2012 and twelve months ended December 31, 2011 were as follows:

	2012			2011		
	Gross Carrying Amount	Accumulated Impairment Loss	Net	Gross Carrying Amount	Accumulated Impairment Loss	Net
Beginning balance at January 1	\$279,498	\$(139,414)	\$140,084	\$279,434	\$(139,414)	\$140,020
Acquired goodwill (1)	—	—	—	64	—	64
Ending balance at March 31, 2012 and December 31, 2011	\$279,498	\$(139,414)	\$140,084	\$279,498	\$(139,414)	\$140,084

- (1) In September 2011, the Company purchased a product line from GE Osmonics, Inc. for \$458. The Company recorded \$315 of intangible assets and \$64 of goodwill in connection with the acquisition.

Intangible Assets

Components of the Company's intangible assets are comprised of the following:

	Gross	Accumulated Amortization	Net
As of March 31, 2012:			
Completed technology (1)	\$ 77,055	\$ (76,842)	\$ 213
Customer relationships	9,190	(8,471)	719
Patents, trademarks, trade names and other	24,703	(24,485)	218
	\$110,948	\$(109,798)	\$1,150
As of December 31, 2011:			
Completed technology	\$ 76,829	\$ (76,829)	\$ —
Customer relationships	9,190	(8,393)	797
Patents, trademarks, trade names and other	24,703	(24,457)	246
	\$110,722	\$(109,679)	\$1,043

- (1) Intangible assets of \$226 were re-classified from other assets to intangible assets during the quarter ended March 31, 2012. This related to in-process research and development which was completed during the first quarter of 2012, related to a previous acquisition.

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

Aggregate amortization expense related to acquired intangibles for the three months ended March 31, 2012 and 2011 were \$119 and \$250, respectively. Estimated amortization expense for each of the three remaining fiscal years is as follows:

<u>Year</u>	<u>Amount</u>
2012 (remaining)	\$ 356
2013	475
2014	97
2015	81
2016	81
Thereafter	60

8) Debt

The Company's Japanese subsidiary has lines of credit and short-term borrowing arrangements with two financial institutions which provide for aggregate borrowings as of March 31, 2012 of up to an equivalent of \$30,193 U.S. dollars, which generally expire and are renewed at three month intervals. At March 31, 2012 and December 31, 2011 total borrowings outstanding under these arrangements were \$368 and \$1,932, respectively, at an average interest rate of 0.65%.

9) 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 shipment volume, 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's estimates, revisions to the estimated warranty liability would be required. The product warranty liability is included in other current liabilities in the consolidated balance sheets.

Product warranty activities were as follows:

	<u>Three Months Ended March 31,</u>	
	<u>2012</u>	<u>2011</u>
Balance at January 1	\$ 8,315	\$ 9,865
Provision for product warranties	692	1,986
Direct charges to warranty liability	(1,462)	(1,898)
Balance at March 31	<u>\$ 7,545</u>	<u>\$ 9,953</u>

10) Income Taxes

The Company's effective tax rate for the three months ended March 31, 2012 and 2011 was 32.3% and 33.0%, respectively. The effective tax rates for the three months ended March 31, 2012 and 2011, and the related income tax provisions were lower than the U.S. statutory tax rate primarily due to the geographic mix of income and profits earned by the Company's international subsidiaries being taxed at rates lower than the U.S. statutory rate.

At March 31, 2012, the total amount of gross unrecognized tax benefits, which excludes interest and penalties, was approximately \$35,915. At December 31, 2011, the total amount of gross unrecognized tax benefits, which excludes interest and penalties, was approximately \$35,151. The net increase from December 31, 2011 was attributable to an increase in reserves for existing uncertain tax positions. If these benefits were recognized in a future period, the timing of which is not estimable, the net unrecognized tax benefit of \$16,151, excluding interest and penalties, would impact the Company's effective tax rate as of March 31, 2012. The Company accrues interest expense and, if applicable, penalties for any uncertain tax positions. Interest and penalties are classified as a component of income tax expense. At March 31, 2012 and December 31, 2011, the Company had accrued interest on unrecognized tax benefits of approximately \$1,145 and \$973, respectively.

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

The Company and its subsidiaries are subject to examination by federal, state and foreign tax authorities. Subsequent to the close of the quarter ended March 31, 2012, the Company was notified by the Internal Revenue Service that an examination of its U.S. federal tax filings for open tax years through 2009 will commence during the second quarter of 2012. The statute of limitations for the Company's tax filings varies by tax jurisdiction between fiscal years 2001 through present.

While the Company believes it has adequately provided for all tax positions, amounts asserted by taxing authorities could materially differ from the Company's accrued positions as a result of uncertain and complex application of tax regulations. Additionally, the recognition and measurement of certain tax benefits include estimates and judgment by management and inherently includes subjectivity. Accordingly, the Company could record additional provisions or benefits due to U.S. federal, state, and foreign tax-related matters in the future as it revises estimates or settles or otherwise resolves the underlying matters.

11) Net Income Per Share

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

	Three Months Ended March 31,	
	2012	2011
Numerator:		
Net income	\$ 22,768	\$ 38,043
Denominator:		
Shares used in net income per common share – basic	52,504,000	51,407,000
Effect of dilutive securities:		
Stock options, restricted stock and employee stock purchase plan	718,000	979,000
Shares used in net income per common share – diluted	53,222,000	52,386,000
Basic income per common share	\$ 0.43	\$ 0.74
Diluted income per common share	\$ 0.43	\$ 0.73

Basic earnings per share ("EPS") is computed by dividing income available to common stockholders by the weighted-average number of common shares outstanding during the period. The computation of diluted EPS is similar to the computation of basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding (using the treasury stock method) if securities containing potentially dilutive common shares (stock options and restricted stock units) had been converted to such common shares, and if such assumed conversion is dilutive.

As of March 31, 2012 and 2011, stock options and restricted stock units relating to an aggregate of approximately 1,477,000 and 1,505,000 shares, respectively, were outstanding. For the three months ended March 31, 2012 and 2011, the potential dilutive effect of approximately 97,000 and 180,000 weighted-average shares of stock options were excluded from the computation of diluted weighted-average shares outstanding as the shares would have an anti-dilutive effect on EPS.

12) Stockholder's Equity

Stock Repurchase Program

On July 25, 2011, the Company's Board of Directors approved a share repurchase program for the repurchase of up to an aggregate of \$200,000 of its outstanding common stock from time to time in open market purchases, privately negotiated transactions or through other appropriate means. The timing and quantity of any shares repurchased will depend upon a variety of factors, including business conditions, stock market conditions and business development activities, including but not limited to merger and acquisition opportunities. These repurchases may be commenced, suspended or discontinued at any time without prior notice.

During the three months ended March 31, 2012, the Company repurchased 124,000 shares of its common stock for \$3,721 for an average price of \$30.01 per share.

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NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

Cash Dividends

Holders of the Company's common stock are entitled to receive dividends when they are declared by the Company's Board of Directors. On February 13, 2012, the Company's Board of Directors declared a quarterly cash dividend of \$0.15 per share that was paid on March 16, 2012 to shareholders of record as of March 1, 2012. Cash dividends paid were \$7,877 for the quarter ended March 31, 2012.

On May 7, 2012, our Board of Directors declared a quarterly cash dividend of \$0.15 per share to be paid on June 15, 2012 to shareholders of record as of June 1, 2012. Future dividend declarations, if any, as well as the record and payment dates for such dividends, are subject to the final determination of the Company's Board of Directors.

13) Geographic, Product and Significant Customer Information

The Company operates in one segment for the development, manufacturing, sales and servicing of products that measure, control, power and monitor critical parameters of advanced manufacturing processes. The Company's chief decision-maker reviews consolidated operating results to make decisions about allocating resources and assessing performance for the entire Company.

Information about the Company's operations in different geographic regions is presented in the tables below. Net revenues 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 revenues.

	Three Months Ended March 31,	
	2012	2011
Geographic net revenues:		
United States	\$ 95,104	\$ 110,603
Japan	33,433	24,639
Europe	21,985	29,704
Asia (excluding Japan)	40,346	66,905
	<u>\$ 190,868</u>	<u>\$ 231,851</u>
	March 31, 2012	December 31, 2011
Long-lived assets (1):		
United States	\$ 58,482	\$ 56,760
Japan	3,515	3,908
Europe	5,606	5,437
Asia (excluding Japan)	8,271	8,374
	<u>\$ 75,874</u>	<u>\$ 74,479</u>

(1) Long-lived assets include property, plant and equipment, net and certain other assets.

The Company reports revenues and groups products into three product groups, based upon the similarity of the product function, type of product, and manufacturing process. Net product and service revenues for these product groups are as follows:

	Three Months Ended March 31,	
	2012	2011
Instruments and Control Systems	\$ 93,274	\$ 112,136
Power and Reactive Gas Products	77,566	96,482
Vacuum Products	20,028	23,233
	<u>\$ 190,868</u>	<u>\$ 231,851</u>

MKS INSTRUMENTS, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS – (continued)
(in thousands, except share and per share data)

14) Commitments and Contingencies

The Company is subject to various 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.

The Company reviewed its contractual obligations and commercial commitments as of March 31, 2012 and determined that there were no significant changes from the ones set forth in the notes to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011.

MKS INSTRUMENTS, INC.

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

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). When used herein, the words "believes," "anticipates," "plans," "expects," "estimates," "would," "will," "intends" 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. While we may elect to update forward looking statements at some point in the future, we specifically disclaim any obligation to do so even if our estimates or expectations change. Risks and uncertainties include, but are not limited to those discussed in our Annual Report on Form 10-K for the year ended December 31, 2011 in the section entitled "Risk Factors" as referenced in Part II, Item 1A "Risk Factors" of this Quarterly Report on Form 10-Q.

Overview

We are a global provider of instruments, subsystems and process control solutions that measure, control, power, monitor and analyze critical parameters of advanced manufacturing processes to improve process performance and productivity. We also provide services relating to the maintenance and repair of our products, software maintenance, installation services and training.

We are managed as one operating segment. We report revenues and group our products into three product groups, based upon the similarity of the product function, type of product and manufacturing processes. These three groups of products are: 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 composition analysis, control and information technology, power and reactive gas generation and vacuum technology. Our products are used in diverse markets, applications and processes. Our primary served markets are manufacturers of capital equipment for semiconductor devices, and for other thin film applications including flat panel displays, solar cells and light emitting diodes ("LEDs"), data storage media and other advanced manufactured products. We also leverage our technology into other markets with advanced manufacturing applications including medical equipment, pharmaceutical manufacturing, energy generation and environmental monitoring.

We have a diverse base of customers that includes manufacturers of semiconductor capital equipment and semiconductor devices, thin film capital equipment used in the manufacture of flat panel displays, LEDs, solar cells, data storage media and other coating applications; and industrial, medical, pharmaceutical manufacturing, energy generation, environmental monitoring and other advanced manufacturing companies, as well as university, government and industrial research laboratories. For the three months ended March 31, 2012 and 2011, approximately 66% and 59% of our net sales, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers. We expect that sales to semiconductor capital equipment manufacturers and semiconductor device manufacturers will continue to account for a substantial portion of our sales.

Net revenues to semiconductor capital equipment manufacture and semiconductor device manufacture customers declined by 8%, for the three months ended March 31, 2012 compared to the same period in the prior year. Late in the second quarter of 2011, we started to see a weakening in our orders and sales, mainly in the semiconductor markets, as worldwide economic uncertainty and slowing consumer spending resulted in lower electronics demand and a slowing of investments in semiconductor production capacity for the second half of 2011. We did however, see order rates improve in the fourth quarter and as a result, sales to semiconductor capital equipment manufacture and semiconductor device manufacture customers have increased by 19%, for the three months ended March 31, 2012 compared to the three months ended December 31, 2011. The semiconductor capital equipment industry is subject to rapid demand shifts, which are difficult to predict, and we are uncertain as to the timing or extent of future demand or any future weakness in the semiconductor capital equipment industry.

Our net revenues sold to other advanced markets, which exclude semiconductor capital equipment and semiconductor device product applications, decreased 32% for the three months ended March 31, 2012 compared to the same period for the prior year. This decline was primarily caused by decreases in the solar and LED markets as manufacturers utilize existing capacity from 2010 and 2011. Our net revenues to all other non-semiconductor markets for the three months ended March 31, 2012 remained relatively flat compared to the fourth quarter of 2011. These advanced and growing markets include LED, medical, pharmaceutical, environmental, thin films, solar and other markets and we anticipate that these markets will grow and could represent a larger portion of our revenue.

A significant portion of our net revenues is to customers in international markets. For the three months ended March 31, 2012 and 2011, international net revenues accounted for approximately 50% and 52% of our net revenues, respectively. A significant portion of our

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international net revenues were in Japan and China. We expect that international net revenues will continue to represent a significant percentage of our total net revenues.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. There have been no material changes in our critical accounting policies since December 31, 2011. For further information, please see the discussion of critical accounting policies in our Annual Report on Form 10-K for the year ended December 31, 2011 in the section captioned “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Estimates.”

Results of Operations

The following table sets forth, for the periods indicated, the percentage of total net revenues of certain line items included in MKS’ consolidated statements of operations and comprehensive income data.

	Three Months Ended March 31,	
	2012	2011
Net revenues:		
Product	86.2%	89.5%
Services	13.8	10.5
Total net revenues	100.0	100.0
Cost of revenues:		
Cost of product revenues	47.7	48.0
Cost of service revenues	8.4	6.1
Total cost of revenues	56.1	54.1
Gross profit	43.9	45.9
Research and development	8.4	7.3
Selling, general and administrative	17.9	14.1
Amortization of intangible assets	0.1	0.1
Income from operations	17.5	24.4
Interest income, net	0.1	0.1
Income before income taxes	17.6	24.5
Provision for income taxes	5.7	8.1
Net income	11.9%	16.4%

Net Revenues (dollars in millions)

	Three Months Ended March 31,		
	2012	2011	% Change
Net Revenues:			
Product	\$164.5	\$207.5	(20.7%)
Service	26.4	24.4	8.1
Total net revenues	<u>\$190.9</u>	<u>\$231.9</u>	<u>(17.7%)</u>

Product revenues decreased \$43.0 million during the three months ended March 31, 2012, compared to the same period for the prior year. Product revenues related to our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers decreased by \$10.8 million, as late in the second quarter of 2011, we started to see a weakening in orders and sales, mainly in the semiconductor markets, as worldwide economic uncertainty and slowing consumer spending has resulted in lower electronics demand, rising chip inventories and a slowing of investment in semiconductor production capacity. Our product revenues for other advanced markets, which exclude semiconductor capital equipment and semiconductor device product applications, decreased \$32.2 million during the three months ended March 31, 2012, compared to the same period for the prior year, primarily due to a reduction in product sales to the solar and LED markets, as they utilize existing capacity from 2010 and 2011.

Service revenues consisted mainly of fees for services relating to the maintenance and repair of our products, software maintenance, installation services and training. Service revenues increased \$2.0 million during the three months ended March 31, 2012, compared to the same period for the prior year, as a result of a larger installed base of products and due to our investment in 2011 to grow our worldwide service business.

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Total international net revenues, including product and service, were \$95.8 million for the three months ended March 31, 2012, or 50.2% of net revenues compared to \$121.2 million for the three months ended March 31, 2011, or 52.4% of net revenues. The decrease is mainly attributed to a decrease in sales in China, mainly attributed to a large solar order during the three months ended March 31, 2011 and a decrease in sales in Europe.

Gross Profit

	Three Months Ended March 31,		
	2012	2011	% Points Change
Gross profit as percentage of net revenues:			
Product	44.7%	46.4%	(1.7)%
Service	39.1	41.5	(2.4)
Total gross profit percentage	43.9%	45.9%	(2.0)%

Gross profit on product revenues decreased by 1.7 percentage points for the three months ended March 31, 2012, compared to the same period for the prior year. The decrease is mainly due to a decrease of 1.9 percentage points due to unfavorable revenue volumes, 1.3 percentage points due to higher excess and obsolete related charges, as there was higher sell through in the prior year and 1.7 percentage points related to higher overhead spending. These decreases were partially offset by 2.3 percentage points primarily related to favorable product mix, an increase of 0.6 percentage points due to lower variable compensation expense and 0.4 percentage points due to a customs and duties refund that was paid in prior years.

Cost of service revenues consists primarily of costs of providing services for repair and training which includes salaries and related expenses and other fixed costs. Service gross profit decreased by 2.4 percentage points for the three months ended March 31, 2012, compared to the same period for the prior year. The decrease is due to a decrease of 2.6 percentage points primarily due to unfavorable product mix and 0.8 percentage points due to higher overhead, as a result of continued investments in service. These decreases were partially offset by 1.2 percentage points due to favorable revenue volumes.

Research and Development (dollars in millions)

	Three Months Ended March 31,		
	2012	2011	% Change
Research and development expenses	\$16.2	\$16.9	(4.2)%

Research and development expense decreased \$0.7 million during the three months ended March 31, 2012, compared to the same period for the prior year. The decrease includes a \$0.3 million decrease in consulting costs due to changes in the timeline of certain projects, a \$0.2 million decrease in compensation expense and a \$0.1 million decrease in patent costs.

Our research and development is primarily focused on developing and improving our instruments, components, subsystems and process control solutions to improve process performance and productivity.

We have thousands of products and our research and development efforts primarily consist of a large number of projects related to these products, none of which is individually material to us. Current projects typically have durations of 3 to 30 months depending upon whether the product is an enhancement of existing technology or a new product. Our current initiatives include projects to enhance the performance characteristics of older products, to develop new products and to integrate various technologies into subsystems. These projects support in large part the transition in the semiconductor industry to smaller integrated circuit geometries and in the flat panel display and solar markets to larger substrate sizes, which require more advanced process control technology. Research and development expenses consist primarily of salaries and related expenses for personnel engaged in research and development, fees paid to consultants, material costs for prototypes and other expenses related to the design, development, testing and enhancement of our products as well as legal costs associated with maintaining and defending our intellectual property.

We believe that the continued investment in research and development and ongoing development of new products are essential to the expansion of our markets, and we expect to continue to make significant investment in research and development activities. We are subject to risks if products are not developed in a timely manner, due to rapidly changing customer requirements and competitive threats from other companies and technologies. Our success primarily depends on our products being designed into new generations of equipment for the semiconductor industry and other advanced technology markets. We develop products that are technologically advanced so that they are positioned to be chosen for use in each successive generation of semiconductor capital equipment. If our products are not chosen to be designed into our customers' products, our net revenues may be reduced during the lifespan of those products.

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Selling, General and Administrative (dollars in millions)

	Three Months Ended March 31,		
	2012	2011	% Change
Selling, general and administrative expenses	\$34.1	\$32.7	4.3%

Selling, general and administrative expenses increased \$1.4 million for the three months ended March 31, 2012, compared to the same period for the prior year. The increase includes a \$1.1 million increase due to timing of fringe related benefits and variable compensation and a \$0.7 million increase related to unfavorable foreign exchange rates. These increases were offset by a \$0.3 million decrease in advertising, investor and public relations expenses and a \$0.1 million decrease in facilities expenses.

Amortization of Intangible Assets (dollars in millions)

	Three Months Ended March 31,		
	2012	2011	% Change
Amortization of intangible assets	\$ 0.1	\$ 0.3	(52.4)%

Amortization expense for the three months ended March 31, 2012 decreased \$0.2 million, compared to the same period for the prior year, as certain intangible assets became fully amortized during 2011.

Interest Income, Net (dollars in millions)

	Three Months Ended March 31,		
	2012	2011	% Change
Interest income, net	\$ 0.3	\$ 0.3	(7.0)%

Interest income, net decreased modestly in the three months ended March 31, 2012 compared to the same period for the prior year, mainly related to lower interest rates compared to the same period for the prior year.

Provision for Income Taxes (dollars in millions)

	Three Months Ended March 31,	
	2012	2011
Provision for income taxes	\$ 10.9	\$ 18.7

Our effective tax rate for the three months ended March 31, 2012 and 2011 was 32.3% and 33.0%, respectively. The first quarter 2012 and 2011 effective tax rates and the related income tax provisions were lower than the U.S. statutory tax rate primarily due to geographic mix of income and profits earned by our international subsidiaries being taxed at rates lower than the U.S. statutory rate.

At March 31, 2012, our total amount of gross unrecognized tax benefits, which excludes interest and penalties, was approximately \$35.9 million. At December 31, 2011, our total amount of gross unrecognized tax benefits, which excludes interest and penalties, was approximately \$35.2 million. The net increase from December 31, 2011 was attributable to an increase in reserves for existing uncertain tax positions. If these benefits were recognized in a future period, the timing of which is not estimable, the net unrecognized tax benefit of \$16.2 million, excluding interest and penalties, would impact our effective tax rate. We accrue interest expense and, if applicable, penalties for any uncertain tax positions. Interest and penalties are classified as a component of income tax expense. At March 31, 2012 and December 31, 2011, we had accrued interest on unrecognized tax benefits of approximately \$1.1 million and \$1.0 million, respectively.

We and our subsidiaries are subject to examination by federal, state and foreign tax authorities. Subsequent to the close of the quarter ended March 31, 2012, the Company was notified by the Internal Revenue Service that an examination of its U.S. federal tax filings for open tax years through 2009 will commence during the second quarter of 2012. The statute of limitations for our tax filings varies by tax jurisdiction between fiscal years 2001 through present.

Our future effective income tax rate depends on various factors, such as tax legislation and the geographic composition of our pre-tax income. We monitor these factors and timely adjust our effective tax rate accordingly. Additionally, the effective tax rate could be adversely affected by changes in the valuation of deferred tax assets and liabilities. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent on our ability to generate sufficient future taxable income in the United States. While we believe we have adequately provided for all tax positions, amounts asserted by taxing authorities could materially differ from our accrued positions as a result of uncertain and complex application of tax regulations. Additionally, the recognition and measurement of certain tax benefits include estimates and judgment by management and inherently includes subjectivity. Accordingly, we could record additional provisions or benefits due to U.S. federal, state, and foreign tax-related matters in the future as we revise estimates or settle or otherwise resolve the underlying matters.

Liquidity and Capital Resources

Cash, cash equivalents and short-term investments totaled \$569.4 million at March 31, 2012 compared to \$565.5 million at December 31, 2011. This increase was mainly attributable to our net cash provided by operating activities as a result of our net income, partially offset by a dividend payment to our common shareholders, repurchase of common stock and capital expenditures.

Net cash provided by operating activities was \$27.4 million for the three months ended March 31, 2012 and resulted mainly from net income of \$22.8 million, which included non-cash charges of \$10.7 million, partially offset by a change in working capital of \$6.9 million. The increase in working capital consisted primarily of a \$12.2 million increase in trade accounts receivable and a \$2.3 million decrease in accounts payable. These increases were partially offset by a net decrease in income taxes receivable of \$3.6 million and a decrease in other current assets of \$3.5 million. The increase in trade accounts receivable is mainly a result of higher net sales for the three months ended March 31, 2012, compared to the fourth quarter of 2011.

Net cash provided by operating activities was \$26.8 million for the three months ended March 31, 2011 and resulted mainly from net income of \$38.0 million which included non-cash charges of \$9.3 million, partially offset by an increase of \$18.3 million in working capital and a \$5.0 million increase in excess tax benefits from stock-based compensation. The increase in working capital consisted primarily of a \$16.8 million increase in trade accounts receivable and a \$6.0 million increase in inventories as a result of increased business levels, partially offset by a \$12.2 million increase in income taxes payable as a result of higher operating income.

Net cash provided by investing activities of \$15.4 million for the three months ended March 31, 2012, resulted primarily from net sales of \$20.2 million of short-term and long-term investments partially offset by \$4.6 million in purchases of production related equipment. Net cash provided by investing activities of \$46.4 million for the three months ended March 31, 2011, resulted primarily from the net sales of \$48.8 million of short-term and long-term investments partially offset by \$2.3 million in purchases of production related equipment.

Net cash used in financing activities was \$12.4 million for the three months ended March 31, 2012 and consisted primarily of \$7.9 million of dividend payments made to common stockholders, \$3.7 million related to the repurchase of common stock and \$1.5 million of net payments made on short-term borrowings. Net cash provided by financing activities was \$21.5 million for the three months ended March 31, 2011 and consisted primarily of \$27.8 million of cash received from the exercise of previously issued stock options and a related \$5.0 million from excess tax benefits from stock-based compensation. These increases were partially offset by \$5.1 million in taxes paid upon the vesting of restricted stock units and \$7.8 million of dividend payments to common stockholders.

Our Japanese subsidiary has lines of credit and short-term borrowing arrangements with two financial institutions which provide for aggregate borrowings as of March 31, 2012 of up to an equivalent of \$30.2 million U.S. dollars, which generally expire and are renewed at three month intervals. At March 31, 2012 and December 31, 2011, total borrowings outstanding under these arrangements were \$0.4 million and \$1.9 million, respectively, at an average interest rate of 0.65%.

On February 13, 2012, our Board of Directors declared a quarterly cash dividend of \$0.15 per share that was paid on March 16, 2012 to shareholders of record as of March 1, 2012. Cash dividends paid were \$7,877 for the quarter ended March 31, 2012. On May 7, 2012, our Board of Directors declared a quarterly cash dividend of \$0.15 per share to be paid on June 15, 2012 to shareholders of record as of June 1, 2012. Future dividend declarations, if any, as well as the record and payment dates for such dividends, are subject to the final determination of our Board of Directors.

We believe that our current cash position and available borrowings will be sufficient to satisfy our estimated working capital and planned capital expenditure requirements through at least the next 12 months and the foreseeable future.

Off-Balance Sheet Arrangements

We do not have any financial partnerships with unconsolidated entities, such as entities often referred to as structured finance, special purpose entities or variable interest entities, which are often established for the purpose of facilitating off-balance sheet arrangements or for other contractually narrow or limited purposes. Accordingly, we have no off-balance sheet arrangements that have or are reasonably expected to have a current or future effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

Recently Issued Accounting Pronouncements

In September 2011, the Financial Accounting Standards Board (“FASB”) issued an Accounting Standards Update (“ASU”) which simplifies how companies test goodwill for impairment. The amendments permit an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in the goodwill accounting standard. The amendments were effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption was permitted. We adopted this new ASU in the fourth quarter of 2011. The new ASU did not have a material effect on our consolidated financial statements.

In June 2011, the FASB issued an ASU which eliminates the option to present the components of other comprehensive income as part of the statement of equity and requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments were effective retrospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. The ASU requires changes in presentation only. We adopted this new ASU in the first quarter of 2012, electing to present the components of other comprehensive income as one continuous statement. The new ASU did not have a material effect on our consolidated financial statements.

In May 2011, the FASB issued an ASU which applies to all reporting entities that are required or permitted to measure or disclose the fair value of an asset, a liability, or an instrument classified in a reporting entity’s shareholders’ equity in the financial statements. The amendments do not extend the use of fair value accounting, but provide guidance on how it should be applied where its use is already required or permitted by other standards within U.S. GAAP. The amendments change the wording used to describe many requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. Additionally, the ASU clarifies the FASB’s intent about the application of existing fair value measurements. The amendments in this ASU are to be applied prospectively. For public entities, the amendments were effective during interim and annual periods beginning after December 15, 2011. Early application by public entities was not permitted. We adopted the new ASU in the first quarter of 2012. The new ASU did not have a material effect on our consolidated financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Information concerning market risk is contained in the section entitled “Quantitative and Qualitative Disclosures About Market Risk” contained in our Annual Report on Form 10-K for the year ended December 31, 2011 filed with the Securities and Exchange Commission on February 24, 2012. As of March 31, 2012, there were no material changes in our exposure to market risk from December 31, 2011.

ITEM 4. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2012. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer 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 Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2012, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended March 31, 2012 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

We are subject to various 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 our results of operations, financial condition or cash flows.

ITEM 1A. RISK FACTORS.

Information regarding risk factors affecting the Company's business are discussed in the Company's Annual Report on Form 10-K for the year ended December 31, 2011 in the section entitled "Risk Factors." There have been no material changes from the risks disclosed therein.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

The following table sets forth certain information with respect to repurchases of our common stock during the three months ended March 31, 2012.

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾⁽²⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
January 1 – January 30, 2012	40,000	\$ 28.99	40,000	\$ 196,834,000
February 1 – February 29, 2012	40,000	\$ 31.51	40,000	\$ 195,573,000
March 1 – March 31, 2012	44,000	\$ 29.56	44,000	\$ 194,272,000
Total	124,000	\$ 30.01	124,000	

- (1) On July 25, 2011, our Board of Directors approved a share repurchase program ("the Program") for the repurchase of up to an aggregate of \$200 million of our common stock from time to time in open market purchases, privately negotiated transactions or through other appropriate means, which we announced on July 27, 2011. The timing and quantity of any shares repurchased will depend upon a variety of factors, including business conditions, stock market conditions and business development activities, including but not limited to merger and acquisition opportunities. These repurchases may be commenced, suspended or discontinued at any time without prior notice.
- (2) We have repurchased approximately 210,000 shares of our common stock pursuant to the Program since its adoption.

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(3) ITEM 6. EXHIBITS.

<u>Exhibit No.</u>	<u>Exhibit Description</u>
3.1(1)	Restated Articles of Organization
3.2(2)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 18, 2001
3.3(3)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 16, 2002
3.4(4)	Amended and Restated By-Laws
10.1*	Form of 2012 Management Incentive Bonus Plan for Named Executive Officers
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 and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document. **
101.SCH	XBRL Taxonomy Extension Schema Document. **
101.CAL	XBRL Taxonomy Calculation Linkbase Document. **
101.LAB	XBRL Taxonomy Labels Linkbase Document. **
101.PRE	XBRL Taxonomy Presentation Linkbase Document. **
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document. **

* Confidential treatment requested as to certain positions, which portions have been filed separately with the Securities and Exchange Commission.

** Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

- (1) Incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-4 (File No. 333-49738) filed with the Securities and Exchange Commission on November 13, 2000.
- (2) Incorporated by reference to Exhibit 3.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001.
- (3) Incorporated by reference to Exhibit 3.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.
- (4) Incorporated by reference to Exhibit 3.3 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on January 28, 1999, as amended.

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 9, 2012

By: /s/ Seth H. Bagshaw

Seth H. Bagshaw

Vice President, Chief Financial Officer and Treasurer

(Principal Financial Officer)

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Asterisks denote omissions.

**Summary of MKS Instruments, Inc.'s
2012 Management Incentive Bonus**

The 2012 Management Incentive Bonus Plan is based on 2012 targets for pro-forma operating income, after bonus and before tax. The bonus plan formula is calculated as follows:

Base Salary x Individual Incentive Target x Corporate Performance Multiplier

The "Corporate Performance Multiplier" ranges from 0% to 200%, depending upon achievement of the specified corporate goal. Accordingly, the maximum payout possible for each of the participants is 200% of his respective Individual Incentive Target set forth below and the minimum payout is zero, with incremental payouts for performance between these levels.

The following chart summarizes the Individual Incentive Targets for each of the Company's "named executive officers" under the rules of the Securities and Exchange Commission.

<u>Participant</u>	<u>Individual Incentive Target (% of annual base earnings)</u>
Leo Berlinghieri	100%
Seth Bagshaw	60%
Gerald Colella	75%
John Lee	60%
John Smith	50%

The MKS 2012 Management Incentive Bonus Plan is set forth below.



PERSONAL & CONFIDENTIAL
MKS MEMORANDUM
[FORM OF]

2012 Annual Management/Key Employee Bonus Plan
Based on Adjusted Operating Income
(January 1 – December 31)

The payout of your bonus will be achieved according to the schedule shown in the chart below. For example, you will receive 80% of your target bonus if our Adjusted Operating Income reaches \$** million and 100% of your target bonus if Adjusted Operating Income reaches \$** million. At an Adjusted Operating Income of \$** million or more, you will receive 200% of your target corporate bonus.

Adjusted Operating Income	Bonus Payout (percentage of target)
<\$**	0%
\$**	70%
\$**	80%
\$**	90%
\$**	100%
\$**	120%
\$**	140%
\$**	160%
\$**	180%
>=**	200%

This information is extremely confidential and should be treated as such. Please do not share this information with anyone inside or outside of MKS Instruments, Inc.



2012 MKS Management/Key Employee Bonus Plans

The MKS Annual Bonus Plan (The Plan) is based on fiscal year performance (January through December). Performance measurements are set at the beginning of the fiscal year.

Plan participants have 100% of their bonus tied to achievement of corporate goals.

Participation/Approval:

Participation in the Plan requires the approval of the most senior individual in each organization as well as Human Resources and the Chief Executive Officer and President. Participation in the plan is reviewed on an annual basis. Past participation in this program, as well as the percentage target, is not guaranteed for subsequent plan years.

Target:

Bonus target guidelines are established for positions as a percentage of pay.

Payout:

The bonus payout amount is a percentage of eligible W-2 earnings received during the plan period, i.e. "base salary" including regular, holiday, vacation, sick, and retro pay. Bonus payments attributable to the prior year are excluded from this calculation.

Administration:

Bonus payout is made as soon as possible after the end of the fiscal year and the performance assessment has been completed, but in no event later than March 15 of the subsequent year.

Note: In order to receive the bonus payment the plan participant must be actively employed as of the payout date of The Plan.

MKS reserves the right to change the plan at any time, subject to senior management discretion. In no way does this plan create a contract of employment.

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, Leo Berlinghieri, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - 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 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: May 9, 2012

/s/ Leo Berlinghieri

Leo Berlinghieri
Chief Executive Officer and 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, Seth H. Bagshaw, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - 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 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: May 9, 2012

/s/ Seth H. Bagshaw

Seth H. Bagshaw
Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND 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 March 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Leo Berlinghieri, Chief Executive Officer and President of the Company, and Seth H. Bagshaw, Vice President, Chief Financial Officer and Treasurer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, based on his knowledge:

- (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: May 9, 2012

/s/ Leo Berlinghieri

Leo Berlinghieri

Chief Executive Officer and President

Dated: May 9, 2012

/s/ Seth H. Bagshaw

Seth H. Bagshaw

Vice President, Chief Financial Officer and Treasurer