MKS INSTRUMENTS INC
Form 10-Q
November 08, 2006

Table of Contents

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**
**Washington, DC 20549**
**FORM 10-Q**

***(MARK ONE)***

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

**For the quarterly period ended September 30, 2006**

**or**

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

**For the transition period from _____ to _____**

**Commission file number 0-23621**
**MKS INSTRUMENTS, INC.**
*(Exact name of registrant as specified in its charter)*

| Massachusetts | 04-2277512 |
|---|---|
| *(State or other jurisdiction of incorporation or organization)* | *(I.R.S. Employer Identification No.)* |
| 90 Industrial Way, Wilmington, Massachusetts | 01887 |
| *(Address of principal executive offices)* | *(Zip Code)* |

Registrant s telephone number, including area code (978) 284-4000

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 þ No o

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

Large accelerated filer o Accelerated filer þ Non-accelerated filer o

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

Number of shares outstanding of the issuer s common stock as of October 27, 2006: 56,449,046

**Table of Contents**

MKS INSTRUMENTS, INC.
FORM 10-Q
INDEX


PART I. FINANCIAL INFORMATION

| | | |
|---|---|---|
| ITEM 1. | FINANCIAL STATEMENTS. | |
| | Consolidated Balance Sheets September 30, 2006 and December 31, 2005 | 3 |
| | Consolidated Statements of Operations Three and nine months ended September 30, 2006 and 2005 | 4 |
| | Consolidated Statements of Cash Flows Nine months ended September 30, 2006 and 2005 | 5 |
| | Notes to Consolidated Financial Statements | 6 |
| ITEM 2. | MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS. | 17 |
| ITEM 3. | QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK. | 23 |
| ITEM 4. | CONTROLS AND PROCEDURES. | 23 |

PART II. OTHER INFORMATION

| | | |
|---|---|---|
| ITEM 1. | LEGAL PROCEEDINGS. | 24 |
| ITEM 1A. | RISK FACTORS. | 24 |
| ITEM 6. | EXHIBITS. | 30 |

SIGNATURES.

Ex-10.1 2004 Stock Incentive Plan, as amended
Ex-31.1 Section 302 Certification of CEO
Ex-31.2 Section 302 Certification of CFO
Ex-32.1 Section 906 Certification of CEO & CFO

Table of Contents

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

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

| | September 30, 2006 (Unaudited) | December 31, 2005 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 219,989 | $ 220,573 |
| Short-term investments | 45,411 | 72,046 |
| Trade accounts receivable, net | 126,833 | 82,610 |
| Inventories | 132,994 | 98,242 |
| Deferred income taxes | 16,836 | 15,165 |
| Other current assets | 17,771 | 10,511 |
| Total current assets | 559,834 | 499,147 |
| Property, plant and equipment, net | 79,564 | 78,726 |
| Long-term investments | 3,555 | 857 |
| Goodwill | 322,645 | 255,243 |
| Acquired intangible assets, net | 47,030 | 27,422 |
| Other assets | 2,370 | 2,345 |
| Total assets | $ 1,014,998 | $ 863,740 |
| **LIABILITIES AND STOCKHOLDERS EQUITY** | | |
| Current liabilities: | | |
| Short-term borrowings | $ 22,036 | $ 16,966 |
| Current portion of long-term debt | | 1,429 |
| Current portion of capital lease obligations | 1,008 | 491 |
| Accounts payable | 38,995 | 27,955 |
| Accrued compensation | 24,282 | 13,583 |
| Income taxes payable | 14,560 | 9,564 |
| Other accrued expenses | 30,985 | 19,099 |
| Total current liabilities | 131,866 | 89,087 |
| Long-term debt | 5,000 | 5,238 |
| Long-term portion of capital lease obligations | 1,123 | 914 |
| Deferred income taxes | 8,476 | 2,153 |
| Other liabilities | 4,826 | 3,505 |
| Commitments and contingencies (Note 10) | | |
| Stockholders equity: | | |
| Preferred Stock, $0.01 par value, 2,000,000 shares authorized; none issued and outstanding | | |
| | 113 | 113 |

| | | | | |
|---|---|---|---|---|
| Common Stock, no par value, 200,000,000 shares authorized; 56,349,566 and 54,397,267 issued and outstanding at September 30, 2006 and December 31, 2005, respectively | | | | |
| Additional paid-in capital | | 671,560 | | 639,152 |
| Retained earnings | | 184,384 | | 116,642 |
| Accumulated other comprehensive income | | 7,650 | | 6,936 |
| Total stockholders equity | | 863,707 | | 762,843 |
| Total liabilities and stockholders equity | $ | 1,014,998 | $ | 863,740 |

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

Table of Contents

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Net sales | $ 205,494 | $ 122,520 | $ 582,906 | $ 380,120 |
| Cost of sales | 114,875 | 74,863 | 332,041 | 231,315 |
| Gross profit | 90,619 | 47,657 | 250,865 | 148,805 |
| Research and development | 17,964 | 13,684 | 51,684 | 42,922 |
| Selling, general and administrative | 33,017 | 22,341 | 93,082 | 69,230 |
| Amortization of acquired intangible assets | 4,016 | 3,382 | 13,356 | 10,765 |
| Purchase of in-process technology | | | 800 | |
| Restructuring charges | | (278) | | 176 |
| Income from operations | 35,622 | 8,528 | 91,943 | 25,712 |
| Interest expense | 228 | 186 | 659 | 611 |
| Interest income | 2,467 | 1,997 | 6,262 | 4,868 |
| Income before income taxes | 37,861 | 10,339 | 97,546 | 29,969 |
| Provision for income taxes | 9,928 | 3,115 | 29,804 | 7,509 |
| Net income | $ 27,933 | $ 7,224 | $ 67,742 | $ 22,460 |
| Net income per share: | | | | |
| Basic | $ 0.50 | $ 0.13 | $ 1.23 | $ 0.42 |
| Diluted | $ 0.50 | $ 0.13 | $ 1.21 | $ 0.41 |
| Weighted average common shares outstanding: | | | | |
| Basic | 55,668 | 54,146 | 55,222 | 54,000 |
| Diluted | 56,105 | 54,743 | 55,760 | 54,529 |

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

Table of Contents

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

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2006 | 2005 |
| Cash flows from operating activities: | | |
| Net income | $ 67,742 | $ 22,460 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 23,688 | 19,792 |
| Stock-based compensation | 9,857 | |
| Tax benefit from stock-based compensation | 4,225 | 804 |
| Excess tax benefit from stock-based compensation | (4,171) | |
| Deferred taxes | (1,451) | (1,234) |
| Other | 392 | 261 |
| Changes in operating assets and liabilities, net of the effect of businesses acquired: | | |
| Trade accounts receivable | (37,118) | 2,857 |
| Inventories | (30,136) | (896) |
| Other current assets | (4,564) | (3,014) |
| Accrued expenses and other current liabilities | 19,114 | 221 |
| Accounts payable | 5,817 | (1,666) |
| Income taxes payable | 1,379 | 723 |
| Net cash provided by operating activities | 54,774 | 40,308 |
| Cash flows from investing activities: | | |
| Acquisitions of businesses, net of cash acquired | (96,672) | |
| Purchases of short-term and long-term available for sale investments | (68,562) | (181,868) |
| Maturities and sales of short-term and long-term available for sale investments | 92,546 | 171,394 |
| Purchases of property, plant and equipment | (7,077) | (7,603) |
| Other | (432) | 846 |
| Net cash used in investing activities | (80,197) | (17,231) |
| Cash flows from financing activities: | | |
| Proceeds from short-term borrowings | 67,334 | 61,247 |
| Payments on short-term borrowings | (62,155) | (62,175) |
| Principal payments on long-term debt and capital lease obligations | (2,170) | (1,969) |
| Proceeds from exercise of stock options and employee stock purchase plan | 18,660 | 3,970 |
| Excess tax benefit from stock-based compensation | 4,171 | |
| Net cash provided by financing activities | 25,840 | 1,073 |
| Effect of exchange rate changes on cash and cash equivalents | (1,001) | (2,550) |

| | | |
|---|---|---|
| Increase (decrease) in cash and cash equivalents | (584) | 21,600 |
| Cash and cash equivalents at beginning of period | 220,573 | 138,389 |
| Cash and cash equivalents at end of period | $ 219,989 | $ 159,989 |
| Supplemental cash flow disclosure: | | |
| Income taxes paid | $ 26,300 | $ 8,395 |

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

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Tables in thousands, except share and per share data, or as otherwise noted)

1) Basis of Presentation

The terms MKS and the Company refer to MKS Instruments, Inc. and its subsidiaries. The interim financial data as of September 30, 2006 and for the three and nine months ended September 30, 2006 and 2005 is unaudited; however, in the opinion of MKS, the interim data includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the interim periods. The unaudited 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 generally accepted accounting principles. The consolidated financial statements should be read in conjunction with the December 31, 2005 audited consolidated financial statements and notes thereto included in the MKS Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 16, 2006.

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, accounts receivable, inventory, intangible assets, goodwill, other long-lived assets, income taxes, deferred tax valuation allowance, stock-based compensation 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.

Certain amounts in prior periods have been reclassified to be consistent with current period classifications.

2) Stock-Based Compensation

Effect of Adoption of SFAS 123R, Share-Based Payment

Prior to January 1, 2006, the Company accounted for stock-based awards to employees using the intrinsic value method as prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations ( APB 25 ). Accordingly, no compensation expense was recorded for options issued to employees in fixed amounts with fixed exercise prices at least equal to the fair market value of the Company s common stock at the date of grant. The Company had adopted the disclosure-only provisions of Statement of Financial Accounting Standards ( SFAS ) No. 123, Accounting for Stock-Based Compensation, as amended by SFAS No. 148, Accounting for Stock-Based Compensation-Transition and Disclosure, ( SFAS 123 ).

On January 7, 2005, the Company accelerated the vesting of outstanding stock options granted to employees and officers with an exercise price of $23.00 per share or greater. As a result of this action, options to purchase approximately 1.6 million shares of the Company s common stock became exercisable on January 7, 2005. No compensation expense was recorded related to this action as these options had no intrinsic value on January 7, 2005. For purposes of the SFAS 123 proforma calculation below, the expense related to the options that were accelerated was $16,886,000, net of tax, for the three months ended March 31, 2005 and the nine months ended September 30, 2005, respectively. The reason that the Company accelerated the vesting of the identified stock options was to reduce the Company s compensation expense in periods subsequent to the adoption of SFAS 123R, Share-Based Payment ( SFAS 123R ).

As of January 1, 2006, the Company adopted SFAS 123R using the modified prospective method. SFAS 123R requires companies to recognize compensation cost for all stock-based awards based upon the grant-date fair value of those awards and to recognize the expense over the requisite service period for awards expected to vest. Using the modified prospective method of adopting SFAS 123R, MKS began recognizing compensation expense for equity-based awards granted after January 1, 2006 plus unvested awards granted prior to January 1, 2006. Under this method of implementation, prior periods were not restated.

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

The Company recognized the full impact of its share-based payment plans in the consolidated statements of operations for the three and nine months ended September 30, 2006 under SFAS 123R and did not capitalize any such costs on the consolidated balance sheets, as such costs that qualified for capitalization were not material. The following table reflects the effect of recording stock-based compensation for the three and nine months ended September 30, 2006 in accordance with SFAS 123R:

| | Three Months Ended September 30, 2006 | Nine Months Ended September 30, 2006 |
|---|---|---|
| Stock-based compensation expense by type of award: | | |
| Employee stock options | $ 2,686 | $ 6,653 |
| Restricted stock | 1,019 | 2,696 |
| Employee stock purchase plan | 172 | 508 |
| Total stock-based compensation | 3,877 | 9,857 |
| Tax effect on stock-based compensation | (1,389) | (3,506) |
| Net effect on net income | $ 2,488 | $ 6,351 |
| Effect on earnings per share: | | |
| Basic | $ 0.04 | $ 0.12 |
| Diluted | $ 0.04 | $ 0.11 |

Valuation Assumptions

In connection with the adoption of SFAS 123R, the Company reassessed its valuation technique and related assumptions. The Company determines the fair value of restricted stock based on the number of shares granted and the closing market price of the Company s common stock on the date of the award, and estimates the fair value of stock options and employee stock purchase rights using the Black-Scholes valuation model, which is consistent with our valuation techniques previously utilized for options in footnote disclosures required under SFAS 123. Such values are recognized as expense on a straight-line basis over the requisite service periods, net of estimated forfeitures. The estimation of stock-based awards that will ultimately vest requires significant judgment. We consider many factors when estimating expected forfeitures, including types of awards and historical experience. Actual results, and future changes in estimates, may differ substantially from our current estimates.

The fair values of options and employee stock purchase rights at the date of grant were estimated using the Black-Scholes option-pricing model with the following weighted average assumptions:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Stock option plans: | | | | |
| Expected life (years) | 5.0 | 5.0 | 5.0 | 5.0 |
| Risk-free interest rate | 4.9% | 4.1% | 4.9% | 3.9% |
| Expected volatility | 52.0% | 51.0% | 51.9% | 51.0% |
| Dividend yield | 0.0% | 0.0% | 0.0% | 0.0% |
| Employee stock purchase rights: | | | | |

| | | | | |
|---|---|---|---|---|
| Expected life (years) | 0.5 | 0.5 | 0.5 | 0.5 |
| Risk-free interest rate | 5.1% | 3.1% | 4.6% | 2.7% |
| Expected volatility | 35.0% | 34.0% | 34.4% | 34.0% |
| Dividend yield | 0.0% | 0.0% | 0.0% | 0.0% |

Expected volatilities are based on a combination of implied and historical volatilities of our common stock; the expected life represents the weighted average period of time that options granted are expected to be outstanding giving consideration to vesting schedules and our historical exercise patterns; and the risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option.

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

Prior to the adoption of SFAS 123R

The following table illustrates the effect on net income and net income per share if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee awards.

| | Three Months Ended September 30, 2005 | Nine Months Ended September 30, 2005 |
|---|---|---|
| Net income as reported | $ 7,224 | $ 22,460 |
| Deduct: Total stock-based employee compensation expense determined under the fair-value-based method for all awards, net of tax | (1,583) | (22,006) |
| Pro forma net income | $ 5,641 | $ 454 |
| Basic net income per share: | | |
| As reported | $ 0.13 | $ 0.42 |
| Pro forma | $ 0.10 | $ 0.01 |
| Diluted net income per share: | | |
| As reported | $ 0.13 | $ 0.41 |
| Pro forma | $ 0.10 | $ 0.01 |

Equity Incentive Plans

The Company s equity incentive plans (the Plans ) are intended to attract and retain employees and to provide an incentive for them to assist the Company to achieve long-range performance goals and to enable them to participate in the long-term growth of the Company. Employees may be granted restricted stock and restricted stock units (collectively, restricted stock ), options to purchase shares of the Company s stock and other equity incentives under the Plans. In addition, certain of the Plans provide for the annual grant of stock options to non-employee directors and permit the grant of equity-based awards to consultants. Under the Plans, stock options generally have a vesting period of 25% after one year and 6.25% per quarter thereafter, are exercisable for a period not to exceed 10 years from the date of grant and are granted at prices equal to 100% of the fair market value of our common stock at the grant date. Generally, options granted to non-employee directors, under the Plans, vest at the earliest of (1) the next annual meeting, (2) 13 months from the date of grant, or (3) the effective date of an acquisition. Restricted stock awards generally vest three years from the date of grant. At September 30, 2006, there were 6,161,818 shares authorized for issuance and 4,975,768 shares available for future grants of the Company s common stock under the Plans.

The Company also has two Employee Stock Purchase Plans ( ESPPs ) for United States and international employees, respectively, which enable the Company s employees to purchase MKS common stock. As of September 30, 2006, there were 1,500,000 shares authorized for issuance and 664,013 shares reserved for future issuance under the ESPPs.

Stock Option and Restricted Stock Activity

| | Options Outstanding | Restricted Stock | |
|---|---|---|---|
| | | | Weighted Average |

| | Number of Shares | Weighted Average Exercise Price | Number of Shares | Grant Date Fair Value |
|---|---|---|---|---|
| Outstanding options/non-vested restricted stock at December 31, 2004 | 10,023,717 | $ 20.25 | | |
| Granted | 316,500 | $ 16.93 | | |
| Exercised options/vested restricted stock | (382,211) | $ 10.70 | | |
| Forfeited or expired | (498,735) | $ 23.34 | | |
| Outstanding options/non-vested restricted stock at December 31, 2005 | 9,459,271 | $ 20.36 | | |
| Granted | 102,000 | $ 22.94 | 715,590 | $ 22.04 |
| Exercised options/vested restricted stock | (1,313,200) | $ 13.38 | (833) | $ 22.43 |
| Forfeited or expired | (253,706) | $ 24.10 | (19,540) | $ 22.35 |
| Outstanding options/non-vested restricted stock at September 30, 2006 | 7,994,365 | $ 21.42 | 695,217 | $ 22.03 |

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

The fair value of stock options and restricted stock awards that vested during the nine months ended September 30, 2006 and 2005 was approximately $6,170,000 and $7,763,000, respectively. As of September 30, 2006, the unrecognized compensation cost related to non-vested stock options and the unrecognized compensation cost related to restricted stock was approximately $9,331,000 and $12,188,000, respectively, and will be recognized over an estimated weighted average amortization period of 1.8 years and 2.4 years, respectively.

The following table summarizes information with respect to options outstanding and exercisable under the Plans at September 30, 2006:

| | Options Outstanding | | | | Options Exercisable | | |
|---|---|---|---|---|---|---|---|
| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Life (In Years) | Aggregate Intrinsic Value (in thousands) | Number of Shares | Weighted Average Exercise Price | Aggregate Intrinsic Value (in thousands) |
| $ 4.43 - $ 8.92 | 233,091 | $ 6.37 | 1.7 | $ 3,249 | 233,091 | $ 6.37 | $ 3,249 |
| $10.86 - $19.00 | 3,256,848 | $ 15.88 | 6.5 | 14,413 | 2,272,925 | $ 16.18 | 9,377 |
| $19.18 - $29.50 | 3,635,196 | $ 24.78 | 5.7 | 51 | 3,523,413 | $ 24.83 | 40 |
| $29.93 - $61.50 | 869,230 | $ 32.16 | 5.2 | | 869,230 | $ 32.16 | |
| $ 4.43 - $61.50 | 7,994,365 | $ 21.42 | 5.9 | $ 17,713 | 6,898,659 | $ 22.28 | $ 12,666 |

The weighted average remaining contractual life of options exercisable was 5.5 years at September 30, 2006.

The aggregate intrinsic value in the table above represents the total pretax intrinsic value, based on the Company s closing stock price of $20.31 as of September 30, 2006, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of in-the-money options exercisable as of September 30, 2006 was 2,651,196.

The weighted average grant date fair value of options granted during the nine months ended September 30, 2006 and September 30, 2005, as determined under SFAS 123R and SFAS 123, was $12.00 and $8.09 per share, respectively. The total intrinsic value of options exercised during the nine month period ended September 30, 2006 and September 30, 2005 was approximately $12,148,000 and $2,113,000, respectively.

The total cash received from employees as a result of employee stock option exercises during the nine months ended September 30, 2006 and September 30, 2005 was approximately $17,567,000 and $2,911,000, respectively. In connection with these exercises, the net tax benefits realized by the Company for the nine months ended September 30, 2006 and September 30, 2005 was approximately $4,225,000 and $805,000, respectively.

The Company settles employee stock option exercises with newly issued common shares.

3) Acquisitions

On January 3, 2006, the Company completed its acquisition of Ion Systems, Inc. ( Ion ), a leading provider of electrostatic management solutions located in Alameda, California, pursuant to an Agreement and Plan of Merger dated November 25, 2005. Ion s ionization technology monitors electrostatic charge to reduce process contamination and improve yields, which complements the Company s process monitoring and control technologies. The aggregate purchase price consisted of $68,073,000 in cash, net of $5,056,000 in cash acquired, and $807,000 in acquisition related costs.

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed at the date of the acquisition. The purchase price allocation is preliminary, pending the final determination of fair values of intangible assets and certain assumed assets and liabilities:

| | |
|---|---|
| Current assets | $ 16,191 |
| Intangible assets | 26,100 |
| Other assets | 3,322 |
| Goodwill | 44,964 |
| Total assets acquired | 90,577 |
| Current liabilities | (7,243) |
| Deferred tax liability | (9,398) |
| Total liabilities assumed | (16,641) |
| Total purchase price including acquisition costs | $ 73,936 |

The goodwill and other intangible assets associated with the acquisition are not deductible for tax purposes. Of the $26,100,000 of acquired intangible assets, the following table reflects the allocation of the acquired intangible assets and related estimates of useful lives:

| | | |
|---|---|---|
| Customer relationships | $ 12,500 | 8-year useful life |
| Completed technology | 9,900 | 6-year useful life |
| Tradenames | 2,300 | 8-year useful life |
| Order backlog | 1,000 | 3 months |
| In-process research and development | 400 | |
| | $ 26,100 | |

This transaction resulted in an amount of purchase price that exceeded the estimated fair values of tangible and intangible assets, which was allocated to goodwill. The Company believes that the amount of goodwill relative to identifiable intangible assets relates to several factors including: (1) potential buyer-specific synergies related to market opportunities for a combined product offering and (2) potential to leverage the Company s sales force and intellectual property to attract new customers and revenue.

On January 3, 2006, the Company completed its acquisition of Umetrics, AB ( Umetrics ), a leader in multivariate data analysis and modeling software located in Umea, Sweden, pursuant to a Sale and Purchase Agreement dated December 15, 2005. Umetrics multivariate data analysis and modeling software converts process data into useable information for yield improvement when linked with the Company s open and modular platform of process sensors and data collection, integration, data storage, and visualization capabilities. The purchase price consisted of $27,400,000 in cash, net of $2,602,000 in cash acquired, and $392,000 in acquisition related costs.

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed at the date of the acquisition. The purchase price allocation is preliminary, pending the final determination of fair values of

intangible assets and certain assumed assets and liabilities:

| | |
|---|---|
| Current assets | $ 4,243 |
| Intangible assets | 7,650 |
| Other assets | 400 |
| Goodwill | 22,060 |
| Total assets acquired | 34,353 |
| Current liabilities | (1,929) |
| Deferred tax liability | (2,030) |
| Total liabilities assumed | (3,959) |
| Total purchase price including acquisition costs | $ 30,394 |

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

The goodwill and other intangible assets associated with the acquisition are not deductible for tax purposes. Of the $7,650,000 of acquired intangible assets, the following table reflects the allocation of the acquired intangible assets and related estimates of useful lives:

| | | |
|---|---|---|
| Customer relationships | $ 2,300 | 8-year useful life |
| Completed technology | 4,150 | 4-6-year useful life |
| Tradenames | 800 | 8-year useful life |
| In-process research and development | 400 | |
| | $ 7,650 | |

This transaction resulted in an amount of purchase price that exceeded the estimated fair values of tangible and intangible assets, which was allocated to goodwill. The Company believes that the amount of goodwill relative to identifiable intangible assets relates to several factors including: (1) being a provider of multivariate software technology which will be increasingly important to solution providers for semiconductor and other industrial customers and (2) enhanced ability to combine Umetrics software products with MKS traditional hardware products.

Ion s ionization technology and Umetrics multivariate data analysis technology both complement our process control and monitoring technologies and will support the Company s mission to improve process performance and productivity.

The results of these acquisitions were included in the Company s consolidated operations beginning in January 2006. The pro forma consolidated statements reflecting the operating results of Ion and Umetrics, had they been acquired as of January 1, 2005, would not differ materially from the operating results of the Company as reported for the three and nine months ended September 30, 2005.

4) Goodwill and Intangible Assets

Intangible Assets

Acquired amortizable intangible assets consisted of the following as of September 30, 2006:

| | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
|---|---|---|---|
| Completed technology | $ 86,994 | $ (60,627) | $ 26,367 |
| Customer relationships | 20,932 | (6,478) | 14,454 |
| Patents, trademarks, tradenames and other | 16,494 | (10,285) | 6,209 |
| | $ 124,420 | $ (77,390) | $ 47,030 |

Acquired amortizable intangible assets consisted of the following as of December 31, 2005:

| | | Accumulated |
|---|---|---|

| | Gross Carrying Amount | Amortization | Net Carrying Amount |
|---|---|---|---|
| Completed technology | $ 72,421 | $ (51,520) | $ 20,901 |
| Customer relationships | 6,640 | (4,481) | 2,159 |
| Patents, trademarks, tradenames and other | 12,395 | (8,033) | 4,362 |
| | $ 91,456 | $ (64,034) | $ 27,422 |

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2006 was $4,016,000 and $13,356,000, respectively. Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2005 was $3,382,000 and $10,765,000, respectively. Estimated amortization expense related to acquired intangibles for the remainder of 2006 and in total for the year is $4,016,000 and $17,372,000, respectively. Estimated amortization expense for 2007 and for each of the three succeeding fiscal years is as follows:

| Year | Amount |
|---|---|
| 2007 | $15,713 |
| 2008 | 7,955 |
| 2009 | 5,788 |
| 2010 | 4,695 |

Goodwill

The changes in the carrying amount of goodwill during the nine months ended September 30, 2006 were as follows:

| | |
|---|---|
| Balance at December 31, 2005 | $ 255,243 |
| Goodwill acquired during 2006 | 67,324 |
| Foreign currency translation | 78 |
| | $ 322,645 |

The change in the carrying amount of goodwill during the nine months ended September 30, 2005 was not material.

5) Net Income Per Share

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Numerator | | | | |
| Net income | $ 27,933 | $ 7,224 | $ 67,742 | $ 22,460 |
| Denominator | | | | |
| Shares used in net income per common share basic | 55,668 | 54,146 | 55,222 | 54,000 |
| Effect of dilutive securities: | | | | |
| Stock options, restricted stock and employee stock purchase plan | 437 | 597 | 538 | 529 |
| Shares used in net income per common share diluted | 56,105 | 54,743 | 55,760 | 54,529 |
| Net income per common share | | | | |
| Basic | $ 0.50 | $ 0.13 | $ 1.23 | $ 0.42 |

| | | | | |
|---|---|---|---|---|
| Diluted | $ 0.50 | $ 0.13 | $ 1.21 | $ 0.41 |

For purposes of computing diluted net income per common share, 4,937,000 and 4,809,000 outstanding options and non-vested restricted stock for the three and nine months ended September 30, 2006, respectively, and 4,856,000 and 6,378,000 outstanding options and non-vested restricted stock for the three and nine months ended September 30, 2005, respectively, were excluded from the calculation, as their inclusion would be anti-dilutive. There were options to purchase approximately 7,994,000 and 9,568,000 shares of the Company s common stock outstanding as of September 30, 2006 and 2005, respectively.

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

6) Inventories

Inventories consist of the following:

| | September 30, 2006 | December 31, 2005 |
|---|---|---|
| Raw material | $ 73,563 | $ 48,235 |
| Work in process | 22,551 | 18,283 |
| Finished goods | 36,880 | 31,724 |
| | $ 132,994 | $ 98,242 |

7) Stockholders Equity

Comprehensive Income

Components of comprehensive income were as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Net income | $ 27,933 | $ 7,224 | $ 67,742 | $ 22,460 |
| Other comprehensive income (loss): | | | | |
| Changes in value of financial instruments designated as cash flow hedges (net of taxes of $305 and $54 for the three months ended September 30, respectively, and net of taxes of $34 and $1,020 for the nine months ended September 30, respectively) | 509 | 89 | 57 | 1,702 |
| Foreign currency translation adjustment | (1,290) | (878) | 540 | (6,207) |
| Unrealized gain (loss) on investments (net of taxes of $36 and $15 for the three months ended September 30, respectively, and net of tax of $70 and net of tax benefit of $7 for the nine months ended September 30, respectively) | 60 | 26 | 117 | (13) |
| Other comprehensive income (loss) | (721) | (763) | 714 | (4,518) |
| Total comprehensive income | $ 27,212 | $ 6,461 | $ 68,456 | $ 17,942 |

8) Income Taxes

The Company records income taxes using the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. The Company evaluates the realizability of its net deferred tax assets and assesses the need for a valuation allowance on a quarterly basis. The future benefit to be derived from

its deferred tax assets is dependent upon its ability to generate sufficient future taxable income to realize the assets. The Company records a valuation allowance to reduce its net deferred tax assets to the amount that may be more likely than not to be realized. To the extent the Company establishes a valuation allowance, an expense will be recorded within the provision for income taxes line on the consolidated statements of operations.

At September 30, 2006, the Company continued to maintain a valuation allowance for certain state tax credits for which it is more likely than not that they will not be realized.

The Company s effective tax rate for the three and nine months ended September 30, 2006 was 26.2% and 30.6%, respectively. The effective tax rate is less than the statutory tax rate primarily due to a net benefit of $1,565,000 attributable to certain discrete tax matters related to our international operations, as described below, and the profits of the Company s international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

Through September 30, 2006, the Company had not provided deferred income taxes on the undistributed earnings of its foreign subsidiaries because such earnings were intended to be permanently reinvested outside the U.S. Determination of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances existing if and when remittance occurs. At September 30, 2006, the Company had $131,951,000 of undistributed earnings in its foreign subsidiaries.

On November 10, 2005, the FASB issued FASB Staff Position No. FAS 123(R)-3 Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards. The Company has elected to adopt the alternative transition method provided in the FASB Staff Position for calculating the tax effects of stock-based compensation pursuant to SFAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool ( APIC pool ) related to the tax effects of employee stock-based compensation, and to determine the subsequent impact on the APIC pool and consolidated statements of cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS 123R.

In the normal course of business, the Company and its subsidiaries are examined by various tax authorities, including the Internal Revenue Service ( IRS ). Any such examination could result in an unfavorable settlement of any particular issue and may require the use of cash. Unfavorable or favorable resolution of any such examination could result in an increase or a reduction, respectively, to our effective tax rate in the quarter of resolution. Although the Company believes that its tax positions are consistent with applicable U.S. federal and state and international laws, certain tax reserves are maintained at September 30, 2006 should these positions be challenged by the applicable tax authority and additional tax assessed on audit**.**

During the quarter ended September 30, 2006, the Company received a notification letter from the Israeli Ministry of Industry Trade and Labor ( MITL ) indicating that the Company s Israeli operations were in compliance with requirements relating to the tax holiday granted to the Company s manufacturing operations in Israel in 2001. This tax holiday is anticipated to expire in 2011 and is subject to meeting continued investment, employment and other requirements under the guidelines of the MITL. Additionally, the Company recorded the impact of both a change in German tax rules allowing interest deductions on certain loans and an adjustment relating to transfer pricing. As a result of these items the Company recorded a net benefit to income tax expense of $1,565,000.

During the second quarter of 2005, the IRS completed its examination of the Company s tax returns for the tax years 1999 through 2002. As a result of this examination, during the three months ended June 30, 2005, the Company recorded a benefit to income tax expense of $1,901,000 and a $576,000 reduction of goodwill related to a previous acquisition.

9) 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 sales to unaffiliated customers are based on the location in which the sale originated. Transfers between geographic areas are at negotiated transfer prices and have been eliminated from consolidated net sales.

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Geographic net sales | | | | |
| United States | $ 133,214 | $ 78,063 | $ 391,723 | $ 237,206 |
| Japan | 23,640 | 19,969 | 69,745 | 62,165 |
| Europe | 18,972 | 12,171 | 50,843 | 40,077 |
| Asia | 29,668 | 12,317 | 70,595 | 40,672 |
| | $ 205,494 | $ 122,520 | $ 582,906 | $ 380,120 |

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

| | September 30, 2006 | December 31, 2005 |
|---|---|---|
| Long-lived assets: | | |
| United States | $ 69,083 | $ 66,588 |
| Japan | 5,348 | 5,679 |
| Europe | 4,067 | 4,311 |
| Asia | 3,436 | 4,493 |
| | $ 81,934 | $ 81,071 |

The Company groups its products into three product groups. Net sales for these product groups are as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Instruments and Control Systems | $ 98,637 | $ 57,732 | $ 276,861 | $ 177,021 |
| Power and Reactive Gas Products | 85,239 | 50,459 | 245,468 | 158,094 |
| Vacuum Products | 21,618 | 14,329 | 60,577 | 45,005 |
| | $ 205,494 | $ 122,520 | $ 582,906 | $ 380,120 |

The Company had one customer comprising 21% of net sales for the three and nine months ended September 30, 2006, respectively. The Company had one customer comprising 17% and 16%, respectively, and one customer comprising 11% and 10%, respectively, of net sales for the three and nine months ended September 30, 2005.

10) Commitments and Contingencies

On November 3, 1999, On-Line Technologies Inc. ( On-Line ), which was acquired by MKS in 2001, brought suit in federal district court in Connecticut against Perkin-Elmer Corp. ( Perkin-Elmer ) and certain other defendants for infringement of On-Line s U.S. Patent No. 5,440,143 (the 143 patent ). The suit sought injunctive relief and damages for infringement. Perkin-Elmer filed a counterclaim seeking invalidity of the patent, costs and attorneys fees, and in June 2002, moved for summary judgment. In April 2003, the court granted the motion and dismissed the case. MKS appealed this decision to the Federal Circuit Court of Appeals, which, on October 13, 2004, reversed the lower court s dismissal of MKS claim for patent infringement, and the case was remanded to the district court. On March 11, 2005, Perkin-Elmer stipulated that they do infringe a specified claim of the 143 patent. Perkin-Elmer filed a motion for summary judgment seeking to invalidate such claim, which motion was denied on March 23, 2006. The court established an October 2006 trial date. Perkin-Elmer then moved for the Court to reconsider its decision and requested a stay of the trial. On September 15, 2006, the Court reversed itself, granting Perkin-Elmer s motion for reconsideration, and holding the specified claim invalid. Following a September 26, 2006 status conference, the court denied the defendants request to stay the trial of MKS remaining claims. The court continued the trial date and requested summary judgment briefing on the remaining claims following a court ordered 30-day delay for the parties to attempt to settle the case. On September 29, 2006, MKS filed a motion for reconsideration of the court s September 15, 2006 decision. That

motion is currently pending.

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.

11) Restructuring Charges

During the three months ended March 31, 2005, the Company initiated a restructuring plan related to its Berlin, Germany location. This consolidation of activities included the reduction of 16 employees. The total restructuring charge related to this consolidation was $454,000, which consisted of $251,000 related to the repayment of a government grant and $203,000 in severance costs.

During the three months ended September 30, 2005, the Company terminated a lease related to a facility previously exited. At June 30, 2005, the Company had an accrual of approximately $784,000 related to this facility. After making the lease

Table of Contents

MKS INSTRUMENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)
(Tables in thousands, except share and per share data, or as otherwise noted)

settlement payment and payments for other contractual obligations, the remaining balance of approximately $278,000 was reversed as there was no remaining obligation.

12) Product Warranties

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

Product warranty activities for the nine months ended September 30 were as follows:

| | 2006 | 2005 |
|---|---|---|
| Balance at the beginning of the year | $ 7,766 | $ 7,601 |
| Fair value of warranty liabilities acquired during the period | 612 | |
| Provisions for product warranties during the period | 10,662 | 5,139 |
| Direct charges to the warranty liability during the period | (7,511) | (6,153) |
| Balance at September 30 | $ 11,529 | $ 6,587 |

13) Recently Issued Accounting Pronouncements

In July 2006, the Financial Accounting Standards Board ( FASB ) issued Financial Accounting Standards Interpretation No. 48 ( FIN 48 ), Accounting for Uncertainty in Income Taxes. FIN 48 clarifies the accounting for uncertainty in income tax positions taken or expected to be taken in tax returns that effect amounts reported in a company s financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. FIN 48 establishes a threshold condition that a tax position must meet for any part of the benefit of that position to be recognized in the financial statements. FIN 48 also provides guidance concerning derecognition, measurement, classification, interest and penalties and disclosure of tax positions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently analyzing the effects of FIN 48.

In September 2006, the SEC issued Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements when quantifying Misstatements in Current Year Financial Statements ( SAB 108 ). SAB 108 requires companies to evaluate the materiality of identified unadjusted errors on each financial statement and related financial statement disclosure using both the rollover approach and the iron curtain approach. The rollover approach quantifies misstatements based on the amount of the error in the current year financial statement whereas the iron curtain approach quantifies misstatements based on the effects of correcting the misstatement existing in the balance sheet at the end of the current year, irrespective of the misstatement s year(s) of origin. Financial statements would require adjustment when either approach results in quantifying a misstatement that is material. Correcting prior year financial statements for immaterial errors would not require previously filed reports to be amended. SAB 108 is effective for interim periods of the first fiscal year ending after November 15, 2006. The Company does not expect the adoption of SAB 108 to have a material impact on our financial statements.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements ( SFAS 157 ). SFAS 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. SFAS 157 is effective for fiscal year beginning after November 15, 2007, with early adoption permitted. The Company is in the process of evaluating any potential impact of SFAS 157.

Table of Contents

MKS INSTRUMENTS, INC.

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

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

**Overview**

We are a leading worldwide provider of instruments, components, subsystems and process control solutions that measure, control, power and monitor critical parameters of semiconductor and other advanced manufacturing processes.

We are managed as one operating segment which is organized around three product groups: Instruments and Control Systems, Power and Reactive Gas Products, and Vacuum Products. Our products are derived from our core competencies in pressure measurement and control, materials delivery, gas and thin-film composition analysis, electrostatic charge control, control and information management, power and reactive gas generation and vacuum technology. Our products are used to manufacture semiconductors and thin film coatings for diverse markets such as flat panel displays, optical and magnetic storage media, architectural glass, solar panels and electro-optical products. We also provide technologies for other markets, including the medical imaging equipment market.

Our customers include semiconductor capital equipment manufacturers, semiconductor device manufacturers, capital equipment manufacturers of thin-film coatings used in flat panel displays, optical and magnetic data storage media, architectural glass, solar panels and electro-optical products, industrial and manufacturing companies, medical equipment manufacturers and university, government and industrial research laboratories. For the nine months ended September 30, 2006 and the full year ended December 31, 2005, we estimate that approximately 72% and 71% of our net sales, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers. We expect that sales to the semiconductor capital equipment manufacturers and semiconductor device manufacturers will continue to account for a substantial majority of our sales.

During the fourth quarter of 2005 and continuing through the third quarter of 2006, we experienced significant increases in customer orders, which caused our sales for the first three quarters of 2006 to increase significantly from 2005 quarterly levels. We currently expect that our fourth quarter 2006 net sales could be slightly lower than our third quarter 2006 net sales. However, the semiconductor capital equipment industry is subject to rapid demand shifts, which are difficult to predict, and we are uncertain how long these sales levels may be maintained or the timing or extent of any future downturn or upturn in the semiconductor capital equipment industry.

A portion of our sales is to operations in international markets. For the nine months ended September 30, 2006 and full year ended December 31, 2005, international sales accounted for approximately 33% and 37% of net sales, respectively.

On January 3, 2006, we completed our acquisition of Ion Systems, Inc. ( Ion ), a leading provider of electrostatic management solutions located in Alameda, California, pursuant to an Agreement and Plan of Merger dated November 25, 2005. Ion s ionization technology monitors electrostatic charges to reduce process contamination and improve yields, which complements our process monitoring and control technologies. The aggregate purchase price consisted of $68.1 million in cash, net of $5.0 million in cash acquired, and $0.8 million in acquisition related costs.

Additionally, on January 3, 2006, we completed our acquisition of Umetrics, AB ( Umetrics ), a leader in multivariate data analysis and modeling software located in Umea, Sweden, pursuant to a Sale and Purchase Agreement dated December 15, 2005. Umetrics multivariate data analysis and modeling software converts process data into useable information for yield improvement, when linked with our open and modular platform of process sensors and data collection, integration, data storage, and visualization capabilities. The purchase price consisted of $27.4 million in cash, net of $2.6 million in cash acquired, and $0.4 million in acquisition related costs.

Table of Contents

**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. Management believes that other than the adoption of Statement of Financial Accounting Standards No. 123R, Share-Based Payment ( SFAS 123R ), there have been no significant changes in our critical accounting policies since December 31, 2005. See the discussion of critical accounting policies in our Annual Report on Form 10-K for the year ended December 31, 2005.

Stock-Based Compensation Expense

Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS 123R, using the modified prospective transition method, and therefore have not restated prior periods results. Under this method we recognize compensation expense for all equity-based awards granted after January 1, 2006 as well as awards granted prior to but not yet vested as of January 1, 2006, in accordance with SFAS 123R. Under the fair value recognition provisions of SFAS 123R, we recognize stock-based compensation net of an estimated forfeiture rate and only recognize compensation cost for those shares expected to vest on a straight-line basis over the requisite service period of the award. The adoption of this standard reduced our net income by $2.5 million and $6.4 million, respectively, for the three and nine months ended September 30, 2006. Prior to SFAS 123R adoption, we accounted for share-based payments under Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees ( APB 25 ) and accordingly, generally recognized compensation expense only when we granted options with a discounted exercise price.

Determining the appropriate fair value model and calculating the fair value of share-based payment awards require the input of highly subjective assumptions, including the expected life of the share-based payment awards and stock price volatility. Management determined that blended volatility, a combination of historical and implied volatility, is more reflective of market conditions and a better indicator of expected volatility than historical or implied volatility. Therefore, expected volatility for the three and nine months ended September 30, 2006 was based on a blended volatility. The assumptions used in calculating the fair value of share-based payment awards represent management s best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected forfeiture rate and only recognize expense for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period. See Note 2 to the consolidated financial statements for a further discussion on stock-based compensation.

**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 statements of operations data.

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Net sales | 100.0% | 100.0% | 100.0% | 100.0% |
| Cost of sales | 55.9 | 61.1 | 57.0 | 60.9 |
| Gross profit | 44.1 | 38.9 | 43.0 | 39.1 |
| Research and development | 8.7 | 11.2 | 8.9 | 11.3 |
| Selling, general and administrative | 16.1 | 18.2 | 16.0 | 18.2 |
| Amortization of acquired intangible assets | 2.0 | 2.8 | 2.3 | 2.8 |
| Purchase of in-process technology | | | 0.1 | |
| Restructuring, asset impairment and other charges | | (0.2) | | |
| Income from operations | 17.3 | 6.9 | 15.7 | 6.8 |

| | | | | |
|---|---|---|---|---|
| Interest income, net | 1.1 | 1.5 | 1.0 | 1.1 |
| Income before income taxes | 18.4 | 8.4 | 16.7 | 7.9 |
| Provision for income taxes | 4.8 | 2.5 | 5.1 | 2.0 |
| Net income | 13.6% | 5.9% | 11.6% | 5.9% |

Table of Contents

Net Sales (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Net sales | $205.5 | $122.5 | 67.7% | $582.9 | $380.1 | 53.3% |

Net sales increased $83.0 million during the three month period ended September 30, 2006 mainly due to an increase in worldwide demand from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, which increased $58.8 million or 70.0% compared to the same period for the prior year. During the first quarter of 2006, we acquired Ion and Umetrics. These acquisitions increased our net sales by approximately $10.3 million for the three month period ended September 30, 2006 compared to the same period in the prior year. International net sales were $72.3 million for the three months ended September 30, 2006 or 35.2% of net sales compared to $44.5 million for the same period of 2005 or 36.3% of net sales.

Net sales increased $202.8 million during the nine month period ended September 30, 2006 mainly due to an increase in worldwide demand from our semiconductor capital equipment manufacturer and semiconductor device manufacturer customers, which increased $150.0 million or 56.2% compared to the same period for the prior year. During the first quarter of 2006, we acquired Ion and Umetrics. These acquisitions increased our net sales by approximately $31.9 million for the nine month period ended September 30, 2006 compared to the same period in the prior year. International net sales were $191.2 million for the nine months ended September 30, 2006 or 32.8% of net sales compared to $142.9 million for the same period of 2005 or 37.6% of net sales.

Gross Profit

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | Percentage Points Change | 2006 | 2005 | Percentage Points Change |
| Gross profit as percentage of net sales | 44.1% | 38.9% | 5.2 | 43.0% | 39.1% | 3.9 |

Gross profit increased during the three months ended September 30, 2006 mainly due to higher production volumes which reduced overhead costs as a percentage of sales by 4.1 percentage points. In addition, the positive impact of gross profit margins from our two acquisitions in 2006, favorable product mix and other reduced manufacturing costs increased our overall margin by approximately 1.3 percentage points during the three months ended September 30, 2006.

Gross profit increased during the nine months ended September 30, 2006 mainly due to higher production volumes which reduced overhead costs as a percentage of sales by 3.5 percentage points. In addition, the positive impact of gross profit margins from our two acquisitions in 2006, favorable product mix and other reduced manufacturing costs increased our overall margin by approximately 0.9 percentage points, offset by increased warranty costs of 0.5 percentage points during the nine months ended September 30, 2006.

Research and Development (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Research and development expenses | $18.0 | $13.7 | 31.3% | $51.7 | $42.9 | 20.4% |

Research and development expense increased $4.3 million during the three months ended September 30, 2006 mainly due to expenses of $1.2 million from the two companies acquired in the first quarter of 2006, $1.3 million in increased compensation, resulting from increased incentive compensation, headcount and salaries and $1.0 million in stock-based compensation expenses recorded during the current quarter.

Research and development expense increased $8.8 million during the nine months ended September 30, 2006 mainly due to expenses of $3.8 million from the two companies acquired in the first quarter of 2006, $3.7 million in

increased compensation, resulting from increased incentive compensation, headcount and salaries, and $2.5 million in stock-based compensation expenses recorded during the current year, offset by a $1.4 million decrease in project material and consulting 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.

Table of Contents

We have hundreds 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 a duration of 12 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 larger wafer sizes and smaller integrated circuit geometries, 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.

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 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. 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 sales may be reduced during the lifespan of those products.

Selling, General and Administrative (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Selling, general and administrative expenses | $33.0 | $22.3 | 47.8% | $93.1 | $69.2 | 34.5% |

Selling, general and administrative expenses increased $10.7 million during the three months ended September 30, 2006 primarily due to expenses of $3.7 million from the two companies acquired in the first quarter of 2006, $3.0 million in increased compensation, resulting from increased incentive compensation, headcount and salaries and $2.3 million in stock-based compensation expenses recorded during the current quarter.

Selling, general and administrative expenses increased $23.9 million during the nine months ended September 30, 2006 primarily due to expenses of $11.8 million from the two companies acquired in the first quarter of 2006, $8.6 million in increased compensation, resulting from increased incentive compensation, headcount and salaries and $5.7 million in stock-based compensation expenses recorded during the current year, offset by $3.7 million in foreign currency exchange gains.

Amortization of Acquired Intangible Assets (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Amortization of acquired intangible assets | $4.0 | $3.4 | 18.7% | $13.4 | $10.8 | 24.1% |

Amortization expense for the three months ended September 30, 2006 increased $0.6 million due to the amortization related to $32.6 million in acquired intangible assets from the acquisitions of the two companies in the first quarter of 2006.

Amortization expense for the nine months ended September 30, 2006 increased $2.6 million due to the amortization related to $32.6 million in acquired intangible assets from the acquisitions of the two companies in the first quarter of 2006, which included a $1.0 million order backlog intangible asset, which was amortized over 3 months during the first quarter of 2006.

Purchase of In-Process Technology (dollars in millions)

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |

| | | % Change | | % Change |
|---|---|---|---|---|
| Purchase of in-process technology | $0.8 | | | |

In-process research and development of $0.8 million for the nine months ended September 30, 2006 arose from the acquisitions of Ion and Umetrics, which we made during the first quarter of 2006. The purchase price of these acquisitions was allocated to the assets acquired, including intangible assets, based on estimated fair values. The intangible assets included

Table of Contents

approximately $0.8 million for acquired in-process technology for projects, generally expected to have durations of 12 months, which did not have alternative future uses. Accordingly, these costs were expensed during the first quarter of 2006.

Restructuring Charges (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Restructuring charges | | $(0.3) | | | $0.2 | |

During the three months ended March 31, 2005, we initiated a restructuring plan related to our Berlin, Germany location. This consolidation of activities included the reduction of 16 employees. The total restructuring charge related to this consolidation was $0.5 million, which consisted of $0.3 million related to the repayment of a government grant and $0.2 million in severance costs.

During the three months ended September 30, 2005, we terminated a lease related to a facility previously exited. At June 30, 2005, we had an accrual of approximately $0.8 million related to this facility. After making the lease settlement payment and payments for other contractual obligations, the remaining balance of approximately $0.3 million was reversed as there was no remaining obligation.

Interest Income, Net (dollars in millions)

| | Three Months Ended September 30, | | | Nine Months Ended September 30, | | |
|---|---|---|---|---|---|---|
| | 2006 | 2005 | % Change | 2006 | 2005 | % Change |
| Interest income, net | $2.2 | $1.8 | 23.6% | $5.6 | $4.3 | 31.6% |

Interest income increased $0.4 million and $1.3 million during the three and nine months ended September 30, 2006, respectively, mainly related to higher interest rates in 2006.

Provision for Income Taxes (dollars in millions)

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2006 | 2005 | 2006 | 2005 |
| Provision for income taxes | $ 9.9 | $ 3.1 | $ 29.8 | $ 7.5 |

Our effective tax rate for the three and nine month periods ended September 30, 2006 was 26.2% and 30.6%, respectively. The effective tax rate is less than the statutory tax rate primarily due to a net benefit of $1.6 million attributable to certain discrete tax matters related to our international operations, as described below, and the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

Our effective tax rate for the three and nine month periods ended September 30, 2005 was 30.0% and 25.0%, respectively. The effective tax rate is less than the statutory tax rate primarily due to a tax benefit recorded as the result of the completion of the Internal Revenue Service ( IRS ) examination (see below), the benefit from U.S. research and development credits and the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

In the normal course of business, the Company and our subsidiaries are examined by various tax authorities, including the IRS. Any such examination could result in an unfavorable settlement of any particular issue and may require the use of cash. Unfavorable or favorable resolution of any such examination could result in an increase or a reduction, respectively, to our effective tax rate in the quarter of resolution. Although the Company believes that its tax positions are consistent with applicable U.S. federal and state and international laws, certain tax reserves are maintained at September 30, 2006 should these positions be challenged by the applicable tax authority and additional tax assessed on audit.

During the quarter ended September 30, 2006, we received a notification letter from the Israeli Ministry of Industry Trade and Labor ( MITL ) indicating that our Israeli operations were in compliance with requirements relating to the tax holiday granted to our manufacturing operations in Israel in 2001. This tax holiday is anticipated to expire in 2011 and is subject to meeting continued investment, employment and other requirements under the guidelines of the MITL. Additionally, we recorded the impact of both a change in German tax rules allowing interest deductions on certain loans and an adjustment relating to transfer pricing. As a result of these items we recorded a net benefit to income tax expense of $1.6 million.

During the quarter ended June 30, 2005, the IRS completed its examination of our tax returns for the tax years 1999 through 2002. As a result of this examination, during the quarter ended June 30, 2005, we recorded a benefit to income tax expense of $1.9 million and a $0.6 million reduction of goodwill related to a previous acquisition.

Table of Contents

The U.S. Research and Development Tax Credit expired at the end of 2005 and, as a result, we have not taken any benefit for this credit in the three and nine month periods ending September 30, 2006. If Congress enacts legislation to reinstate this tax credit, any impact would be recorded in future quarters.

At September 30, 2006, we continued to maintain a valuation allowance for certain state tax credits for which it was more likely than not that the credits will not be realized.

**Liquidity and Capital Resources**

Cash, cash equivalents and short-term investments totaled $265.4 million at September 30, 2006 compared to $292.6 million at December 31, 2005. The primary source of funds for the first nine months of fiscal 2006 was cash provided by operating activities of $54.8 million. Additionally, we purchased two technology companies during the first quarter of 2006 for $96.7 million, net of cash acquired.

Net cash provided by operating activities of $54.8 million for the nine months ended September 30, 2006, resulted mainly from net income of $67.7 million, a $26.3 million increase in operating liabilities and non-cash charges of $23.7 million for depreciation and amortization and $9.9 million for stock-based compensation, offset by an increase in net operating assets of $71.8 million. The net increase in operating liabilities is mainly caused by an increase of $19.1 million in accrued expenses and other current liabilities, primarily as a result of higher accrued compensation and warranty costs and an increase of $5.8 million in accounts payable, primarily as a result of inventory procurement activities. The $71.8 million increase in operating assets consisted primarily of a $37.1 million increase in accounts receivable as a result of higher revenue and a $30.1 million increase in inventory as a result of increased product demand. Net cash provided by operating activities of $40.3 million for the nine months ended September 30, 2005, resulted mainly from net income of $22.5 million and non-cash charges of $19.8 million for depreciation and amortization offset by an increase in operating assets of $1.1 million and a decrease in operating liabilities of $0.7 million. The increase in operating assets is mainly caused by a $3.0 million increase in other currents assets primarily due to tax deposits and a $0.9 million increase in inventories, partially offset by a $2.9 million decrease in accounts receivable as a result of lower revenues. The decrease in operating liabilities is primarily the result of a $1.7 million decrease in accounts payable, partially offset by a $0.7 million increase in taxes payable.

Net cash used in investing activities of $80.2 million for the nine months ended September 30, 2006, resulted primarily from the purchase of two technology companies for $96.7 million, offset by the net maturities of $24.0 million of available for sale investments. Net cash used in investing activities of $17.2 million for the nine months ended September 30, 2005 resulted primarily from net purchases of available for sale investments of $10.5 million and from the purchases of property, plant and equipment of $7.6 million primarily for investment in manufacturing equipment and for the consolidation of our IT infrastructure.

Net cash provided by financing activities of $25.8 million for the nine months ended September 30, 2006, consisted primarily of $18.7 million in proceeds from the exercise of stock options and purchases under our employee stock purchase plan and $5.2 million in net proceeds from short-term borrowings. Net cash provided by financing activities of $1.1 million for the nine months ended September 30, 2005 consisted primarily of $4.0 million in proceeds from the exercise of stock options and purchases under our employee stock purchase plan, partially offset by $2.0 million in principal payments on long-term debt and net payments of $0.9 million on short-term borrowings.

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

To the extent permitted by Massachusetts law, our Restated Articles of Organization, as amended, require us to indemnify any of our current or former officers or directors or any person who has served or is serving in any capacity with respect to any of our employee benefit plans. Because no claim for indemnification has been pursued by any person covered by the relevant provisions of our Restated Articles of Organization, we believe that the estimated exposure for these indemnification obligations is currently minimal. Accordingly, we have no liabilities recorded for these requirements as of September 30, 2006.

We also enter into agreements in the ordinary course of business which include indemnification provisions. Pursuant to these agreements, we indemnify, hold harmless and agree to reimburse the indemnified party, generally our customers, for losses suffered or incurred by the indemnified party in connection with any patent, any other

intellectual property infringement claim, and, in some instances, other claims, by any third party with respect to our products. The term of these indemnification obligations is generally perpetual after execution of the agreement. The maximum potential amount of future payments we could be required to make under these indemnification agreements is, in some instances, unlimited. We have never incurred costs to defend lawsuits or settle claims

Table of Contents

related to these indemnification obligations. As a result, we believe the estimated fair value of these obligations is minimal. Accordingly, we have no liabilities recorded for these obligations as of September 30, 2006.

When as part of an acquisition, we acquire all of the stock or all of the assets and liabilities of another company, we assume liability for certain events or occurrences that took place prior to the date of acquisition. The maximum potential amount of future payments we could be required to make for such obligations is undeterminable at this time. Other than obligations recorded as liabilities at the time of the acquisitions, historically we have not made significant payments for these indemnifications. Accordingly, no liabilities have been recorded for these obligations.

In conjunction with certain asset sales, we may provide routine indemnifications whose terms range in duration and often are not explicitly defined. Where appropriate, an obligation for such indemnifications is recorded as a liability. Because the amount of liability under these types of indemnifications are not explicitly stated, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of the asset sale, historically we have not made significant payments for these indemnifications.

**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 other contractually narrow or limited purposes. Accordingly, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had such relationships.

**Recently Issued Accounting Pronouncements**

In July 2006, the Financial Accounting Standards Board ( FASB ) issued Financial Accounting Standards Interpretation No. 48 ( FIN 48 ), Accounting for Uncertainty in Income Taxes. FIN 48 clarifies the accounting for uncertainty in income taxes taken or expected to be taken in tax returns that effect amounts reported in a company s financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. FIN 48 establishes a threshold condition that a tax position must meet for any part of the benefit of that position to be recognized in the financial statements. FIN 48 also provides guidance concerning derecognition, measurement, classification, interest and penalties and disclosure of tax positions. FIN 48 is effective for fiscal years beginning after December 15, 2006. We are currently analyzing the effects of FIN 48.

In September 2006, the SEC issued Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements when quantifying Misstatements in Current Year Financial Statements ( SAB 108 ). SAB 108 requires companies to evaluate the materiality of identified unadjusted errors on each financial statement and related financial statement disclosure using both the rollover approach and the iron curtain approach. The rollover approach quantifies misstatements based on the amount of the error in the current year financial statement whereas the iron curtain approach quantifies misstatements based on the effects of correcting the misstatement existing in the balance sheet at the end of the current year, irrespective of the misstatement s year(s) of origin. Financial statements would require adjustment when either approach results in quantifying a misstatement that is material. Correcting prior year financial statements for immaterial errors would not require previously filed reports to be amended. SAB 108 is effective for interim periods of the first fiscal year ending after November 15, 2006. We do not expect the adoption of SAB 108 to have a material impact on our financial statements.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements ( SFAS 157 ). SFAS 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. SFAS 157 is effective for fiscal year beginning after November 15, 2007, with early adoption permitted. We are in the process of evaluating any potential impact of SFAS 157.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Information concerning market risk is contained in the Section entitled Item 7A. Quantitative and Qualitative Disclosures about Market Risk contained in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 16, 2006. There were no material changes in our exposure to market risk from December 31, 2005.

ITEM 4. CONTROLS AND PROCEDURES.

a) Effectiveness of disclosure controls and procedures.

Table of Contents

MKS management, including the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2006. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act ), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company 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 September 30, 2006, our chief executive officer and chief financial officer concluded that, as of such date, MKS disclosure controls and procedures were effective at the reasonable assurance level.

b) 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) that occurred during the quarter ended September 30, 2006 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.

On November 3, 1999, On-Line Technologies Inc. ( On-Line ), which we acquired in 2001, brought suit in federal district court in Connecticut against Perkin-Elmer Corp. ( Perkin-Elmer ) and certain other defendants for infringement of On-Line s U.S. Patent No. 5,440,143 (the 143 patent ). The suit sought injunctive relief and damages for infringement. Perkin-Elmer filed a counterclaim seeking invalidity of the patent, costs and attorneys fees, and in June 2002, moved for summary judgment. In April 2003, the court granted the motion and dismissed the case. We appealed this decision to the Federal Circuit Court of Appeals, which, on October 13, 2004, reversed the lower court s dismissal of our claim for patent infringement, and the case was remanded to the district court. On March 11, 2005, Perkin-Elmer stipulated that they do infringe a specified claim of the 143 patent. Perkin-Elmer filed a motion for summary judgment seeking to invalidate such claim, which motion was denied on March 23, 2006. The court established an October 2006 trial date. Perkin-Elmer then moved for the Court to reconsider its decision and requested a stay of the trial. On September 15, 2006, the Court reversed itself, granting Perkin-Elmer s motion for reconsideration, and holding the specified claim invalid. Following a September 26, 2006 status conference, the court denied the defendants request to stay the trial of our remaining claims. The court continued the trial date and requested summary judgment briefing on the remaining claims following a court ordered 30-day delay for the parties to attempt to settle the case. On September 29, 2006, we filed a motion for reconsideration of the court s September 15, 2006 decision. That motion is currently pending.

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

ITEM 1A. RISK FACTORS.

**Our business depends substantially on capital spending in the semiconductor industry which is characterized by periodic fluctuations that may cause a reduction in demand for our products.**

We estimate that approximately 72% of our net sales for the nine months ended September 30, 2006 and 71% and 74%, of our net sales for the years ended December 31, 2005 and 2004, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers, and we expect that sales to such customers will continue to account for a substantial majority of our sales. Our business depends upon the capital expenditures of semiconductor device manufacturers, which in turn depend upon the demand for semiconductors. Periodic reductions in demand for the products manufactured by semiconductor capital equipment manufacturers and semiconductor device manufacturers may adversely affect our business, financial condition and results of operations.

24

Table of Contents

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 2001 through the first half of 2003, we experienced a significant reduction in demand from OEM customers, and lower gross margins due to reduced absorption of manufacturing overhead. In addition, many semiconductor manufacturers have operations and customers in Asia, a region that in past years has experienced serious economic problems including currency devaluations, debt defaults, lack of liquidity and recessions. We cannot be certain of the timing or magnitude of future semiconductor industry downturns. A decline in the level of orders as a result of any downturn or slowdown in the semiconductor capital equipment industry could have a material adverse effect on our business, financial condition and results of operations.

**Our quarterly operating results have fluctuated, and are likely to continue to vary significantly, which may result in volatility in the market price of our common stock.**

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

the timing of the receipt of orders from major customers;

shipment delays;

disruption in sources of supply;

seasonal variations of capital spending by customers;

production capacity constraints; and

specific features requested by customers.

In addition, our quarterly operating results may be adversely affected due to charges incurred in a particular quarter, for example, relating to inventory obsolescence, warranty or asset impairments.

As a result of the factors discussed above, it is likely that we may in the future experience quarterly or annual fluctuations and that, in one or more future quarters, our operating results may fall below the expectations of public market analysts or investors. In any such event, the price of our common stock could decline significantly.

**The loss of net sales to any one of our major customers would likely have a material adverse effect on us.**

Our top ten customers accounted for approximately 48%, 49% and 42% of our net sales for the years ended December 31, 2005, 2004 and 2003, respectively. The loss of a major customer or any reduction in orders by these customers, including reductions due to market or competitive conditions, would likely have a material adverse effect on our business, financial condition and results of operations. During the years ended December 31, 2005, 2004 and 2003, one customer, Applied Materials, accounted for approximately 18%, 20% and 18%, respectively, of our net sales. None of our significant customers, including Applied Materials, has entered into an agreement requiring it to purchase any minimum quantity of our products. The demand for our products from our semiconductor capital equipment customers depends in part on orders received by them from their semiconductor device manufacturer customers.

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

our ability to maintain relationships with existing key customers;

our ability to attract new customers;

our ability to introduce new products in a timely manner for existing and new customers; and

Table of Contents

the success of our customers in creating demand for their capital equipment products which incorporate our products.

**As part of our business strategy, we have entered into and may enter into or seek to enter into business combinations and acquisitions that may be difficult and costly to integrate, may be disruptive to our business, may dilute stockholder value or may divert management attention.**

We made several acquisitions in the years 2000 through 2002 and, more recently, two acquisitions during the nine months ended September 30, 2006. As a part of our business strategy, we may enter into additional business combinations and acquisitions. Acquisitions are typically accompanied by a number of risks, including the difficulty of integrating the operations, technology and personnel of the acquired companies, the potential disruption of our ongoing business and distraction of management, possible internal control weaknesses of the acquired companies, expenses related to the acquisition and potential unknown liabilities associated with acquired businesses. If we are not successful in completing acquisitions that we may pursue in the future, we may be required to reevaluate our growth strategy, and we may incur substantial expenses and devote significant management time and resources in seeking to complete proposed acquisitions that will not generate benefits for us.

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

As a result of our previous acquisitions, we have added several different decentralized operating and accounting systems, resulting in a complex reporting environment. We will need to continue to modify our accounting policies, internal controls, procedures and compliance programs to provide consistency across all our operations. In order to increase efficiency and operating effectiveness and improve corporate visibility into our decentralized operations, we are currently implementing a new worldwide Enterprise Resource Planning ( ERP ) system. We completed our first site implementation in October 2005 and we expect to continue to implement the ERP system by converting our remaining operations in phases over the next few years. Although we have a plan to accomplish the ERP implementation, we may risk potential disruption of our operations during the conversion periods and the implementation could require significantly more management time and higher implementation costs than currently estimated.

**An inability to convince semiconductor device manufacturers to specify the use of our products to our customers that are semiconductor capital equipment manufacturers would weaken our competitive position.**

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

**If our products are not designed into successive generations of our customers products, we will lose significant net sales during the lifespan of those products.**

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

**The semiconductor industry is subject to rapid demand shifts which are difficult to predict. As a result, our inability to expand our manufacturing capacity in response to these rapid shifts may cause a reduction in our market share.**

Our ability to increase sales of certain products depends in part upon our ability to expand our manufacturing capacity for such products in a timely manner. If we are unable to expand our manufacturing capacity on a timely basis or to manage such expansion effectively, our customers could implement our competitors products and, as a result, our market share could be reduced. Because the semiconductor industry is subject to rapid demand shifts which are difficult to foresee, we may not be able to increase

Table of Contents

capacity quickly enough to respond to a rapid increase in demand. Additionally, capacity expansion could increase our fixed operating expenses and if sales levels do not increase to offset the additional expense levels associated with any such expansion, our business, financial condition and results of operations could be materially adversely affected.

**We operate in a highly competitive industry.**

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

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

Although we believe that we compete favorably with respect to these factors, we may not be able to continue to do so. We encounter substantial competition in most of our product lines. Certain of our competitors may have greater financial and other resources than we have. In some cases, competitors are smaller than we are, but well established in specific product niches. We may encounter difficulties in changing established relationships of competitors with a large installed base of products at such customers fabrication facilities. In addition, our competitors can be expected to continue to improve the design and performance of their products. Competitors may develop products that offer price or performance features superior to those of our products. If our competitors develop superior products, we may lose existing customer and market share.

**Sales to foreign markets constitute a substantial portion of our net sales; therefore, our net sales and results of operations could be adversely affected by downturns in economic conditions in countries outside of the United States.**

International sales include sales by our foreign subsidiaries, but exclude direct export sales. International sales accounted for approximately 37%, 34% and 41%, of net sales for the years ended December 31, 2005, 2004 and 2003, respectively, a significant portion of which were sales to Japan.

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

**We have significant foreign operations, and outsource certain operations offshore, which pose significant risks.**

We have significant international sales, service, engineering and manufacturing operations in Europe, Israel and Asia, and have outsourced a portion of our manufacturing to Mexico. We may expand the level of manufacturing and certain other operations that we do offshore in order to take advantage of cost efficiencies available to us in those countries. However, we may not achieve the significant cost savings or other benefits that we anticipate from this program. These foreign operations expose us to operational and political risks that may harm our business, including:

- political and economic instability;
- fluctuations in the value of currencies and high levels of inflation, particularly in Asia and Europe;
- changes in labor conditions and difficulties in staffing and managing foreign operations, including, but not limited to, labor unions;
- reduced or less certain protection for intellectual property rights;
- greater difficulty in collecting accounts receivable and longer payment cycles;

burdens and costs of compliance with a variety of foreign laws;

Table of Contents

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 operating margins or may cause us to raise prices, which could result in reduced sales.**

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

**Key personnel may be difficult to attract and retain.**

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

**Our proprietary technology is important to the continued success of our business. Our failure to protect this proprietary technology may significantly impair our competitive position.**

As of December 31, 2005, we owned 253 U.S. patents, 170 foreign patents and had 104 pending U.S. patent applications. Although we seek to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we cannot be certain that:

we will be able to protect our technology adequately;

competitors will not be able to develop similar technology independently;

any of our pending patent applications will be issued;

domestic and international intellectual property laws will protect our intellectual property rights; or

third parties will not assert that our products infringe patent, copyright or trade secrets of such parties.

**Protection of our intellectual property rights may result in costly litigation.**

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

28

Table of Contents

We may need to expend significant time and expense to protect our intellectual property regardless of the validity or successful outcome of such intellectual property claims. If we lose any litigation, we may be required to seek licenses from others or change, stop manufacturing or stop selling some of our products.

**The market price of our common stock has fluctuated and may continue to fluctuate for reasons over which we have no control.**

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

**Our dependence on sole, limited source suppliers, and international suppliers, could affect our ability to manufacture products and systems.**

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

the potential inability to obtain an adequate supply of required components;

reduced control over pricing and timing of delivery of components; and

the potential inability of our suppliers to develop technologically advanced products to support our growth and development of new systems.

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

**We are subject to governmental regulations. If we fail to comply with these regulations, our business could be harmed.**

We are subject to federal, state, local and foreign regulations, including environmental regulations and regulations relating to the design and operation of our products. We must ensure that the affected products meet a variety of standards, many of which vary across the countries in which our systems are used. For example, the European Union has published directives specifically relating to power supplies. In addition, the European Union has issued directives relating to regulation of recycling and hazardous substances, which may be applicable to our products, or to which some customers may voluntarily elect to adhere to. In addition, China has adopted, and certain other Asian countries have indicated an intention to adopt, similar regulations. We must comply with any applicable regulation adopted in connection with these types of directives in order to ship affected products into countries that adopt these types of regulations. We believe we are in compliance with current applicable regulations, directives and standards and have obtained all necessary permits, approvals, and authorizations to conduct our business. However, compliance with future regulations, directives and standards, or customer demands beyond such requirements, could require us to modify or redesign certain systems, make capital expenditures or incur substantial costs. If we do not comply with current or future regulations, directives and standards:

we could be subject to fines;

our production could be suspended; or

we could be prohibited from offering particular systems in specified markets.

**Certain stockholders have a substantial interest in us and may be able to exert substantial influence over our actions.**

As of September 30, 2006, John R. Bertucci, our Executive Chairman, and certain members of his family, in the aggregate, beneficially owned approximately 13% of our outstanding common stock. As a result, these stockholders, acting together, may be able to exert substantial influence over our actions.

Table of Contents

**Some provisions of our restated articles of organization, as amended, our amended and restated by-laws and Massachusetts law could discourage potential acquisition proposals and could delay or prevent a change in control of us.**

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

**Changes in financial accounting standards may adversely affect our reported results of operations.**

A change in accounting standards or practices could have a significant effect on our reported results and may even affect our reporting of transactions completed before the change was effective. New accounting pronouncements and varying interpretations of existing accounting pronouncements have occurred and may occur in the future. Such changes may adversely affect our reported financial results or may impact our related business practice.

For example, Statement on Financial Accounting Standards No. 123R Share-Based Payment, which requires us to measure all employee stock-based compensation awards using a fair value method and record such expense in our consolidated financial statements, was adopted in the first quarter of 2006, and had a material adverse impact on our consolidated financial statements as reported under generally accepted accounting principles in the United States for the first quarter of 2006 and will adversely impact our consolidated financial statements for fiscal 2006.

ITEM 6. EXHIBITS.

| Exhibit No. | Exhibit Description |
|---|---|
| 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 | 2004 Stock Incentive Plan, as amended |
| 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 |

(1) Incorporated by reference 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 the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2001.

(3) Incorporated by reference to the Registrant s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.

(4) Incorporated by reference to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on January 28, 1999, as amended.

Table of Contents

SIGNATURE

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

MKS INSTRUMENTS, INC.

November 7, 2006

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

31