UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(MARK ONE)

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

For the quarterly period ended September 30, 2001 or

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

Commission file number 000-30941

AXCELIS TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**34-1818596**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*

55 Cherry Hill Drive
Beverly, Massachusetts 01915
(Address of principal executive offices, including zip code)

(978) 787-4000
(Registrant's telephone number, including area code)

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

As of November 2, 2001 there were 97,405,273 shares of the registrant's common stock outstanding.

AXCELIS TECHNOLOGIES, INC.
FORM 10-Q
INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AXCELIS TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

(In thousands, except per share amounts)	Three Months Ended September 30, 2001	Three Months Ended September 30, 2000	Nine Months Ended September 30, 2001	Nine Months Ended September 30, 2000
Net sales	$ 61,796	$ 182,509	$ 315,947	$ 491,404
Cost of products sold	43,201	101,327	194,904	275,480
Gross margin	18,595	81,182	121,043	215,924
Other costs and expenses:				
Research and development	18,373	17,527	56,424	51,029
Selling	11,761	15,881	38,570	40,899
General and administrative	14,873	15,670	46,652	43,295
Amortization of goodwill and intangible assets	2,320	2,320	6,960	6,960
Income (loss) from operations	(28,732)	29,784	(27,563)	73,741
Other income (expense)				
Royalty income	1,546	3,296	6,127	11,068
Equity income of Sumitomo Eaton Nova Corporation	3,162	5,479	13,361	12,135
Interest income	1,187	2,380	4,988	3,818
Other income (expense) - net	(972)	444	(1,220)	(779)
Total other income	4,923	11,599	23,256	26,242
Income (loss) before income taxes	(23,809)	41,383	(4,307)	99,983
Income taxes (credit)	(7,598)	12,903	(2,137)	31,070
Net income (loss)	$ (16,211)	$ 28,480	$ (2,170)	$ 68,913
Basic and diluted net income per share:	$ (0.17)	$ 0.30	$ (0.02)	$ 0.81
Shares used in computing basic & diluted net income (loss) per share:	97,387	95,028	97,165	85,046

See accompanying notes to consolidated financial statements.

AXCELIS TECHNOLOGIES, INC.
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(In thousands)	September 30, 2001	December 31, 2000
ASSETS		
Current assets		
Cash and cash equivalents	$ 139,670	$ 168,157
Accounts receivable, net	75,807	150,482
Inventories	108,409	122,036
Deferred income taxes and other current assets	33,621	26,851
Total current assets	357,507	467,526
Property, plant and equipment, net	90,941	75,653
Investment in Sumitomo Eaton Nova Corporation	54,294	44,915
Goodwill	40,206	42,977
Intangible assets	15,914	20,418
Other assets	30,889	20,842
Total assets	$ 589,751	$ 672,331
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 31,371	$ 46,855
Payable to Eaton Corporation	-	25,818
Accrued compensation	11,270	17,686
Warranty reserve	28,386	33,324
Income taxes payable	-	31,153
Other current liabilities	21,460	15,342
Total current liabilities	92,487	170,178
Deferred income taxes	7,384	7,391
Pension & other employee benefit liabilities	3,677	3,393
Stockholders' equity		
Common stock	97	97
Additional paid-in capital	440,433	437,472
Treasury stock - at cost	(1,218)	-
Retained earnings	56,512	58,682
Accumulated other comprehensive income (loss)	(9,621)	(4,882)
Total stockholders' equity	486,203	491,369
Total liabilities and stockholders' equity	$ 589,751	$ 672,331

See accompanying notes to consolidated financial statements.

AXCELIS TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

(In thousands)	Nine Months Ended September 30, 2001	2000
Cash flows from operating activities:		
Net income (loss)	$ (2,170)	$ 68,913
Adjustments required to reconcile net income to net cash provided (used) by operating activities:		
Depreciation	7,092	6,434
Amortization of goodwill & intangible assets	6,960	6,960
Deferred income taxes	(6)	(7,559)
Equity income of Sumitomo Eaton Nova Corporation	(13,361)	(12,135)
Changes in operating assets & liabilities:		
Accounts receivable, net	73,992	(33,674)
Inventories	13,227	(38,825)
Accounts payable and other current liabilities	(20,268)	61,390
Payable to Eaton Corporation	(25,818)	-
Income taxes payable	(31,153)	-
Other current assets	(6,778)	(697)
Other assets	(10,047)	(1,317)
Other - net	599	(1,266)
Net cash provided (used) by operating activities	(7,731)	48,224
Cash flows from investing activities:		
Expenditures for property, plant and equipment	(21,772)	(7,821)
Sale of Austin, Texas facility	-	10,967
Other - net	(608)	(1,659)
Net cash provided (used) by investing activities	(22,380)	1,487
Cash flows from financing activities:		
Proceeds from the exercise of stock options	664	-
Issuance of common stock from ESPP	2,296	-
Acquisition of treasury shares	(1,218)	-
Net proceeds from the sale of Axcelis common shares	-	349,262
Payment of previously declared dividend to Eaton Corporation	-	(300,000)
Net transfers from Parent Company	-	27,378
Net cash provided by financing activities	1,742	76,640
Effect of foreign exchange rate changes	(118)	(101)
Net increase (decrease) in cash and cash equivalents	(28,487)	126,250
Cash and cash equivalents at beginning of period	168,157	3,530
Cash and cash equivalents at end of period	$ 139,670	$ 129,780

See accompanying notes to consolidated financial statements.

AXCELIS TECHNOLOGIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS *(Unaudited)*
NINE MONTHS ENDED SEPTEMBER 30, 2001

1) Nature of Business and Basis of Presentation

Axcelis Technologies, Inc. ("Axcelis" or the "Company"), a wholly owned subsidiary of Eaton Corporation ("Eaton") prior to July 10, 2000, is a leading producer of ion implantation, dry strip and photostabilization equipment used in the fabrication of semiconductors in the United States, Europe and Asia Pacific. The Company also manufactures rapid thermal processing equipment, which is used in semiconductor manufacturing primarily before and after the ion implantation process. In addition, the Company provides extensive aftermarket service and support, including spare parts, equipment upgrades, maintenance services and customer training. The Company has a 50-50 joint venture with Sumitomo Heavy Industries, Ltd. in Japan. This joint venture, which is known as Sumitomo Eaton Nova Corporation, or SEN, licenses technology from the Company for ion implantation, has exclusive rights to the territory of Japan and is the leading producer of ion implantation equipment in Japan.

On April 26, 2000, Eaton announced its plan to reorganize its semiconductor equipment operations into an independent, publicly-held company, Axcelis Technologies, Inc. On June 30, 2000, Eaton substantially completed the transfer of all the assets and related liabilities of its semiconductor equipment operations to the Company. Prior to the transfer, the financial statements of the semiconductor equipment operations were presented on a combined basis. On July 10, 2000, the Company commenced its initial public offering (IPO) of 15,500,000 shares of common stock. On July 20, 2000, the IPO was completed when the underwriters of the IPO exercised their over-allotment option to purchase an additional 1,550,000 shares. A portion of the net proceeds of the offering of $348.6 million was used to pay a previously declared $300 million dividend to Eaton. Following the IPO, Eaton owned approximately 82 percent of Axcelis' outstanding common stock. On October 25, 2000, Eaton announced that its board of directors had declared a stock dividend of all remaining shares of Axcelis held by Eaton. The dividend was distributed on December 29, 2000. The distribution was made on the basis of 1.179023 shares of Axcelis for each Eaton common share outstanding.

Axcelis' legal separation from Eaton occurred on June 30, 2000, at which time the Company began to operate independently from Eaton. Subsequent to June 30, 2000, the Company's financial statements are prepared on a consolidated basis. Although prior periods have been prepared on a combined basis, all statements presented are referred to as consolidated statements for simplicity. For periods prior to the separation date, the consolidated financial statements reflect historical results of operations and cash flows of Eaton's semiconductor equipment operations during each respective period, and include allocations of certain Eaton expenses. Beginning in the third quarter of fiscal year 2000, Axcelis' consolidated financial statements no longer include an allocated portion of Eaton's corporate services and infrastructure costs. However, the Company has continued to incur amounts payable to Eaton in connection with transitional agreements, under which Eaton provides services, such as voice and data transmissions and other data-related operations, accounts receivable, accounts payable, fixed assets, payroll, general accounting, financial accounting consolidation, cash management, human resources, tax, legal and real estate. As of September 30, 2001, virtually all of these services have been transitioned from Eaton to Axcelis.

The accompanying unaudited consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, the financial statements include normal recurring adjustments necessary for the fair presentation of the results of the periods presented. Operating results for the three and nine months ended September 30, 2001 are not necessarily indicative of the results that may be expected for the year ending December 31, 2001.

The balance sheet at December 31, 2000 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

For furthur information, refer to the consolidated financial statements and footnotes thereto included in Axcelis Technologies, Inc.'s annual report on Form 10-K for the year ended December 31, 2000.

2) Reclassifications
Certain prior year balances have been reclassified to conform with the current year presentation.

3) Net Income (Loss) Per Share
Basic net income (loss) per share is calculated based on the weighted average number of shares of common stock outstanding during the period. Diluted net income (loss) per share is calculated based on the weighted average number of shares of common stock outstanding plus the dilutive effect of stock options, calculated using the treasury stock method.

4) Comprehensive Income (Loss)
The components of comprehensive income (loss) are as follows (in thousands):

	Three Months Ended September 30, 2001	Three Months Ended September 30, 2000	Nine Months Ended September 30, 2001	Nine Months Ended September 30, 2000
Net income (loss)............	$(16,211)	$ 28,480	$ (2,170)	$ 68,913
Foreign currency translation adjustments..................	3,983	(744)	(4,739)	2,239
Comprehensive income (loss)...	$(12,228)	$ 27,736	$ (6,909)	$ 71,152

5) Inventories
Inventories are carried at the lower of cost, determined using the first-in, first out (FIFO) method, or market. The components of inventory were as follows (in thousands):

	September 30, 2001	December 31, 2000
Raw materials................	$ 77,999	$ 74,929
Work-in-process.............	8,758	31,531
Finished goods..............	33,780	26,828
	120,537	133,288
Inventory allowances.........	(12,128)	(11,252)
	$ 108,409	$ 122,036

6) Credit Facility

In October 2001, the Company established a $30 million secured, three-year Revolving Credit Facility. The facility is comprised of a $9 million, 364 day tranche and a $21 million, three year tranche. The purpose of this facility is to provide funds for working capital and general corporate purposes. Borrowings under this credit arrangement are limited to the lesser of $30 million or the sum of a percentage of certain eligible domestic accounts receivable and inventory and bear interest at LIBOR plus an applicable spread. There are no borrowings currently outstanding under this facility.

The facility contains certain financial and other restrictive covenants including minimum profitability, liquidity and leverage ratios as well as maximum capital expenditure levels. The Company is in compliance with all covenants.

7) Contingencies

On January 8, 2001, Axcelis filed a lawsuit against Applied Materials, Inc. (Applied) in the United States District Court for the District of Massachusetts. The complaint alleges that Applied's recently launched (November, 2000) medium current/high energy ion implanter machine infringes an Axcelis patent for ion implantation equipment using radio frequency linear accelerator technology. Axcelis has also alleged that Applied unlawfully interfered with Axcelis' existing and future contracts. On January 18, 2001, Axcelis filed a motion for a preliminary injunction for the reason, among others, that infringement at the time of transition between equipment capable of handling 200 mm wafers and equipment capable of handling 300 mm wafers would irreparably harm Axcelis. Through its motion, the Company asked the court to stop Applied from manufacturing, selling or offering to sell its medium current/high energy ion implanter machine and to order Applied to remove all Axcelis patented technology from implanters that Applied may have placed in chipmakers' plants for process development trials. Applied filed counterclaims of unfair competition, defamation, and tortious interference with prospective economic advantage, all of which it contends arise from certain communications allegedly made by Axcelis about the lawsuit and its claims of infringement.

The parties are engaged in the process of discovery and, based on the scheduling order entered by the court, a hearing on summary judgment motions is scheduled for mid-December, 2001. The Company believes its claims are meritorious and intends to pursue the matter vigorously. Although there can be no assurance of a favorable outcome, the Company does not believe that its pursuit of this matter will have a material adverse effect on the Company's financial condition, results of operations or liquidity. In the event that Applied Materials is found not to have infringed, the Company expects that Applied will continue to use its medium current/high energy implanter as a new and substantial competitor for sales of high energy/medium current ion implantation equipment.

8) Recent Accounting Pronouncements

In June 1998, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities". This statement revises accounting and reporting standards for derivative instruments, including derivative instruments embedded in other contracts, and for hedging activities. SFAS No. 133, as amended by SFAS No. 137 and SFAS No. 138, is effective for fiscal quarters of fiscal years beginning after June 15, 2000. The Company adopted this standard beginnning in the first quarter of 2001. SFAS No. 133 did not have a material impact on the Company's consolidated financial statements for the nine months ended September 30, 2001.

In July 2001, the FASB also issued SFAS No. 142, "Goodwill and Intangible Assets" (SFAS No. 142) which supercedes APB Opinion No. 17, "Intangible Assets." SFAS No. 142 eliminates the current requirement to amortize goodwill and indefinite-lived intangible assets, addresses the amortization of intangible assets with a defined life and addresses the impairment testing and recognition for goodwill and intangible assets. SFAS No. 142 will apply to goodwill and intangible assets arising from transactions completed before and after the effective date. SFAS No. 142 is effective for fiscal years beginning after December 15, 2001. The Company will apply the new rules on accounting for goodwill and other intangible assets beginning in the first quarter of 2002. The Company will perform the first of the required impairment tests of goodwill and indefinite lived intangible assets as of January 1, 2002 and has not yet determined what the effect of these tests will be on the earnings and financial position of the Company.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements in "Management's Discussion and Analysis of Financial Condition and Results of Operations" are forward-looking statements that involve risks and uncertainties. Words such as may, will, should, would, anticipates, expects, intends, plans, believes, seeks, estimates and similar expressions identify such forward-looking statements. The forward-looking statements contained herein are based on current expectations and entail various risks and uncertainties that could cause actual results to differ materially from those expressed in such forward-looking statements. Factors that might cause such a difference include, among other things, those set forth under "Financial Condition, Liquidity and Capital Resources" and "Risk Factors" included in these sections and those appearing elsewhere in this Form 10-Q. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date hereof. The Company assumes no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting forward-looking statements.

Overview

We are a leading producer of ion implantation, dry strip and photostabilization equipment used in the fabrication of semiconductors in the United States, Europe and Asia Pacific. We also manufacture rapid thermal processing equipment, which is used in semiconductor manufacturing primarily before and after the ion implantation process. In addition, we provide extensive aftermarket service and support, including spare parts, equipment upgrades, maintenance services and customer training. We have a 50-50 joint venture with Sumitomo Heavy Industries, Ltd. in Japan. This joint venture, which is known as Sumitomo Eaton Nova Corporation, or SEN, licenses technology from us for ion implantation, has exclusive rights to the territory of Japan and is the leading producer of ion implantation equipment in Japan.

Separation from Eaton Corporation

Prior to the initial public offering on July 10, 2000, we were a wholly owned subsidiary of Eaton Corporation (Eaton). On June 30, 2000, Eaton substantially completed the transfer to us of all of the assets of its semiconductor equipment operations that were not previously owned by us, and we assumed the related liabilities. On December 29, 2000, Eaton completed the divestiture of its investment in Axcelis by distributing its remaining 82% ownership interest in Axcelis in the form of a spin-off to Eaton shareholders. We also entered into various other agreements with Eaton which provide for transitional services and support, including those associated with voice and data transmissions and other data-related operations, accounts receivable, accounts payable, fixed assets, payroll, general accounting, financial accounting consolidation, cash management, human resources, tax, legal and real estate. Under these agreements, we reimbursed Eaton for its direct and indirect costs of providing these services until completion of the divestiture, and thereafter, for a limited time, we will reimburse Eaton for its costs plus an additional fee. The transition periods covered by these agreements generally expire by December 29, 2001. As of September 30, 2001, virtually all of these services have been transitioned from Eaton to Axcelis.

Results of Operations

During fiscal 2000, unprecedented demand for our products and services by our semiconductor manufacturing customers resulted in record sales and earnings for Axcelis for the fiscal year ended December 31, 2000. However, during the first nine months of fiscal 2001, reduced demand for semiconductors combined with an overall slowdown in worldwide economic activity resulted in a significant decline in demand for semiconductor manufacturing equipment. A large number of our customers rescheduled existing orders resulting in the postponement of scheduled equipment deliveries while a smaller number of our customers canceled existing orders. This has resulted in a significant decline in net sales from the record level of the fourth quarter of fiscal 2000.

The following table sets forth consolidated statements of operations data expressed as a percentage of net sales for the periods indicated:

	Three Months Ended September 30, 2001	Three Months Ended September 30, 2000	Nine Months Ended September 30, 2001	Nine Months Ended September 30, 2000
Net Sales.........................	100.0%	100.0%	100.0%	100.0%
Gross Profit......................	30.1	44.5	38.3	43.9
Other costs and expenses				
Research and development........	29.7	9.6	17.8	10.4
Selling.........................	19.0	8.7	12.2	8.3
General and administrative......	24.1	8.6	14.8	8.8
Amortization of goodwill and intangible assets............	3.8	1.3	2.2	1.4
Income (loss) from operations	(46.5)	16.3	(8.7)	15.0
Other income (expense)				
Royalty income..................	2.5	1.8	1.9	2.2
Equity income of SEN............	5.1	3.0	4.2	2.5
Interest income.................	1.9	1.3	1.6	0.8
Other income (expense) - net....	(1.5)	0.3	(0.4)	(0.2)
Income (loss) before income taxes.	(38.5)	22.7	(1.4)	20.3
Income taxes (credit)............	(12.3)	7.1	(0.7)	6.3
Net income (loss)................	(26.2)%	15.6%	(0.7)%	14.0%

Net Sales
Net sales for the third quarter of fiscal 2001 were $61.8 million, a decrease of $120.7 million, or 66.1%, from $182.5 million in the third quarter of fiscal 2000. Net sales for the nine months ended September 30, 2001 were $315.9 million, a decrease of $175.5 million, or 35.7%, from $491.4 million for the same period in fiscal 2000. The decreases in net sales from comparable periods in 2000 were attributable to lower levels of capital spending by our semiconductor manufacturing customers resulting in reduced sales of our products and services.

Gross Profit
Gross profit for the third quarter of fiscal 2001 was $18.6 million, a decrease of $62.6 million, or 77.1%, from $81.2 million in the third quarter of fiscal 2000. Gross profit for the nine months ended September 30, 2001 was $121.0 million, a decrease of $94.9 million, or 43.9%, from $215.9 million for the same period in fiscal 2000. The decrease in gross profit from prior year periods was due mainly to lower sales volume. Gross profit as a percentage of net sales decreased to 30.1% in the third quarter of fiscal 2001 from 44.5% in the comparable prior period. For the first nine months of fiscal 2001, gross profit as a percentage of net sales decreased to 38.3% from 43.9% from the first nine months of fiscal 2000. The decreases from prior year periods were due principally to lower manufacturing capacity utilization caused by lower sales volume.

Operating Expenses
Operating expenses were 76.6% of net sales for the three months ended September 30, 2001, compared to 28.2% for the three months ended September 30, 2000. Operating expenses were 47.0% of net sales for the nine months ended September 30, 2001, compared to 28.9% for the nine months ended September 30, 2000. The increases from prior year periods were due primarily to lower sales volume. Research and development expenses increased by $0.8 million in the third quarter of fiscal 2001 and $5.4 million on a year-to-date basis, versus comparable periods in fiscal 2000, to support our continuing investment to deliver our second generation of 300mm tools. Selling, general and administrative expenses decreased by $4.9 million in the quarter ended September 30, 2001 compared to the quarter ended September 30, 2000 due to lower headcount-related expenses. On a year-to-date basis, selling, general and adminstrative expenses increased by $1.0 million over the first nine months of fiscal 2000, primarily as a result of expenses incurred in connection with the company's patent litigation with Applied Materials, Inc. (see Part II, Item 1 "Legal Proceedings") With revenue levels expected to further decline in the Company's fiscal fourth quarter from reported third quarter levels, we will continue to aggressively manage selling, general and administrative expenses while continuing to maintain research and development spending to enhance future revenue growth.

Income (Loss) From Operations
Loss from operations was $28.7 million for the third quarter of fiscal 2001 as compared to income of $29.8 million for the third quarter of fiscal 2000. Loss from operations was $27.6 million for the nine months ended September 30, 2001 as compared to income of $73.7 million for the nine months ended September 30, 2000. The decreases were primarily a result of the factors described above.

Other Income
Total other income decreased to $4.9 million for the third quarter of fiscal 2001 as compared to $11.6 million for the third quarter of fiscal 2000. Total other income decreased to $23.3 million for the first nine months of fiscal 2001 from $26.2 million for the first nine months of 2000. Total other income consists primarily of royalty income and equity income from SEN. Royalty income, primarily from SEN, was $1.5 million for the third quarter of fiscal 2001 as compared to $3.3 million for the third quarter of fiscal 2000, and $6.1 million in the first nine months of 2001 as compared to $11.1 million in the first nine months of 2000. The decrease in royalty income during the third quarter and the first nine months of fiscal 2001 was due to lower overall SEN sales. Equity income attributable to SEN was $3.2 million for the third quarter of fiscal 2001 compared to $5.5 million for the third quarter of fiscal 2000, and $13.4 million in the first nine months of fiscal 2001 as compared to $12.1 million in the first nine months of fiscal 2000. The decrease in equity income during the third quarter of fiscal 2001 was mainly due to lower gross profit at SEN caused by lower sales. The increase in equity income for the nine months ended September 30, 2001 was primarily attributable to a decrease in operating expenses at SEN which more than offset a volume-related decrease in gross profit.

Income Taxes (Credit)
The company had an income tax credit of $7.6 million in the third quarter of fiscal 2001 as compared to income tax expense of $12.9 million in the third quarter of fiscal 2000. The company had an income tax credit of $2.1 million for the first nine months of fiscal 2001 as compared to income tax expense of $31.1 million for the first nine months of fiscal 2000. The effective income tax rate was 31.9% in the third quarter of fiscal 2001 and 49.6% for the nine months ended September 30, 2001, as compared to 31.2% and 31.1%, respectively, for the third quarter and the first nine months of fiscal 2000. The tax rate in all periods differs from the U.S. statutory rate primarily due to undistributed nontaxable equity income from SEN. Management continually evaluates the need for a valuation allowance for deferred tax assets based on the probability of realization determined by expectations for future taxable income and other factors. Based on available evidence, management believes it is more likely than not that these assets will be realized. However, our inability to carryback operating losses to prior year's earnings and other future events could diminish the possibility of continuing to recognize tax benefits related to these losses and other future deductible temporary differences between the tax and reported bases of assets and liabilities.

Net Income (Loss)
The company incurred a net loss of $16.2 million in the third quarter of fiscal 2001 as compared to net income of $28.5 million in the third quarter of fiscal 2000. The decrease was principally a result of the factors discussed above. Loss per share were $(0.17) in the third quarter of fiscal 2001 and $(0.02) in the first nine months of fiscal 2001. Comparable earnings per share were $0.30 and $0.81 in fiscal 2000, respectively. The decrease was principally a result of the factors discussed above.

Financial Condition, Liquidity and Capital Resources

As of September 30, 2001, cash and cash equivalents were $139.7 million, compared with $168.2 million as of December 31, 2000. The decrease in cash and cash equivalents from December 31, 2000 was due mainly to payments to Eaton of $54.7 million for transition expenses and income tax payments, as well as capital expenditures of $21.8 million and a decrease in accounts payable and other current liabilities of $20.3 million, offset by a decrease in accounts receivable $74.0 million. Net working capital was $265.0 million at September 30, 2001 as compared to net working capital of $297.3 million as of December 31, 2000.

Net cash used by operating activities was $7.7 million for the nine months ended September 30, 2001 as compared to net cash provided by operating activities of $48.2 million for the nine months ended September 30, 2000. The cash used by operating activities in the first nine months of fiscal 2001 was primarily the result of the factors described above.

Capital expenditures were $21.8 million in the first nine months of fiscal 2001 and $7.8 million in the first nine months of fiscal 2000. The increase in capital expenditures in the first nine months of fiscal 2001 was principally due to the expansion of our Beverly, Massachusetts facility to house an advanced product demonstration and customer training center for all of our products. The amount of future capital requirements will depend on a number of factors, including the timing and rate of the expansion of our business.

In October 2001, the Company established a $30 million secured, three-year Revolving Credit Facility. The facility is comprised of a $9 million, 364 day tranche and a $21 million, three year tranche. The purpose of this facility is to provide funds for working capital and general corporate purposes. Borrowings under this credit arrangement are limited to the lesser of $30 million or the sum of a percentage of certain eligible domestic accounts receivable and inventory and bear interest at LIBOR plus an applicable spread. There are no borrowings currently outstanding under this facility.

The facility contains certain financial and other restrictive covenants including minimum profitability, liquidity and leverage ratios as well as maximum capital expenditure levels. The Company is in compliance with all covenants.

Axcelis' liquidity is affected by many factors. Some of these factors are based on normal operations of the business and others relate to the uncertainties of global economies and the semiconductor equipment industry. Although our cash requirements fluctuate based on the timing and the extent of these factors, we believe that, based on our current projections, available cash and our cash flows from operations, along with our borrowing capability, will provide sufficient working capital and satisfy commitments for capital expenditures and other cash requirements of the business over the next twelve months. However, we can offer no assurance that additional financing will not be required during this period or that, if required, such additional financing will be available to meet the cash requirements of the business.

Risk Factors

As defined under Safe Harbor provisions of The Private Securities Litigation Reform Act of 1995, some of the matters discussed in this filing contain forward-looking statements regarding future events that are subject to risks and uncertainties. The following factors, among others, could cause actual results to differ materially from those described by such statements. These factors include, but are not limited to: the cyclical nature of the semiconductor industry, our ability to keep pace with rapid technological changes in semiconductor manufacturing processes, the highly competitive nature of the semiconductor equipment industry, quarterly fluctuations in operating results attributable to the timing and amount of orders for our products and services, dependency on SEN (our Japanese joint venture) for access to the Japanese semiconductor equipment market, and those risk factors contained in the section titled "Outlook" and Exhibit 99 of our Form 10-K for the year ended December 31, 2000. If any of those risk factors actually occur, our business, financial condition and results of operations could be seriously harmed and the trading price of our common stock could decline.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

A discussion of market risk exposures is included in our Form 10-K for the year ended December 31, 2000 under Management's Discussion and Analysis - Outlook and Exhibit 99 file therewith. There were no material changes during the three months ended September 30, 2001.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

On January 8, 2001, Axcelis filed a lawsuit against Applied Materials, Inc. (Applied) in the United States District Court for the District of Massachusetts. The complaint alleges that Applied's recently launched (November, 2000) medium current/high energy ion implanter machine infringes an Axcelis patent for ion implantation equipment using radio frequency linear accelerator technology. Axcelis has also alleged that Applied unlawfully interfered with Axcelis' existing and future contracts. On January 18, 2001, Axcelis filed a motion for a preliminary injunction for the reason, among others, that infringement at the time of transition between equipment capable of handling 200 mm wafers and equipment capable of handling 300 mm wafers would irreparably harm Axcelis. Through its motion, the Company asked the court to stop Applied from manufacturing, selling or offering to sell its medium current/high energy ion implanter machine and to order Applied to remove all Axcelis patented technology from implanters that Applied may have placed in chipmakers' plants for process development trials. Applied filed counterclaims of unfair competition, defamation, and tortious interference with prospective economic advantage, all of which it contends arise from certain communications allegedly made by Axcelis about the lawsuit and its claims of infringement.

The parties are engaged in the process of discovery and, based on the scheduling order entered by the court, a hearing on summary judgment motions is scheduled for mid-December, 2001. The Company believes its claims are meritorious and intends to pursue the matter vigorously. Although there can be no assurance of a favorable outcome, the Company does not believe that its pursuit of this matter will have a material adverse effect on the Company's financial condition, results of operations or liquidity. In the event that Applied Materials is found not to have infringed, the Company expects that Applied will continue to use its medium current/high energy implanter as a new and substantial competitor for sales of high energy/medium current ion implantation equipment.

Item 6. Exhibits and Reports on Form 8-K

a) Exhibits are numbered in accordance with the Exhibit Table of Item 601 of Regulation S-K:

None

b) Reports on Form 8-K

Not applicable

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

AXCELIS TECHNOLOGIES, INC.

Dated: November 6, 2001

By: /s/ Cornelius F. Moses III

Cornelius F. Moses III
Executive Vice President, Chief Financial Officer
Duly authorized officer and
Principal financial officer