

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended: December 31, 2011

OR

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

For the transition period from _____ to _____

Commission File Number: 0-11412

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona

86-0411215

(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer
Identification No.)

131 South Clark Drive, Tempe, Arizona

85281

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: 480-967-5146

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

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

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

Large accelerated filer

Accelerated filer

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

Smaller Reporting Company

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

Shares of Common Stock outstanding as of February 3, 2012: 9,478,757

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
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PART I FINANCIAL INFORMATION**Item 1. Condensed Consolidated Financial Statements****AMTECH SYSTEMS, INC. AND SUBSIDIARIES**
Condensed Consolidated Balance Sheets
(in thousands except share data)

	December 31, 2011	September 30, 2011
	(Unaudited)	
Assets		
Current Assets		
Cash and cash equivalents	\$ 54,936	\$ 67,382
Restricted cash	6,854	6,571
Accounts receivable		
Trade (less allowance for doubtful accounts of \$298 and \$246 at December 31, 2011 and September 30, 2011, respectively)	10,560	14,447
Unbilled and other	22,950	30,822
Inventories	37,451	37,162
Deferred income taxes	9,530	9,560
Prepaid income taxes	4,400	4,260
Other	4,729	4,647
Total current assets	151,410	174,851
Property, Plant and Equipment - Net	12,059	12,680
Intangible Assets - Net	4,738	5,021
Goodwill	13,117	13,313
Total Assets	\$ 181,324	\$ 205,865

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Balance Sheets
(in thousands except share data)

	December 31, 2011	September 30, 2011
	(Unaudited)	
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	\$ 6,510	\$ 8,928
Accrued compensation and related taxes	6,600	10,686
Accrued warranty expense	2,313	2,265
Deferred profit	21,633	27,608
Customer deposits	5,646	7,862
Other accrued liabilities	2,357	6,775
Income taxes payable	16,220	16,670
Total current liabilities	61,279	80,794
Income Taxes Payable Long-term	2,360	2,630
Deferred Income Taxes Long-term	60	110
Total liabilities	63,699	83,534
Commitments and Contingencies		
Stockholders' Equity		
Preferred stock; 100,000,000 shares authorized; none issued	—	—
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 9,478,457 and 9,431,393 at December 31, 2011 and September 30, 2011, respectively	95	94
Additional paid-in capital	83,672	83,207
Accumulated other comprehensive (loss)	(5,809)	(2,078)
Retained Earnings	34,222	35,096
Total Amtech Systems Inc. stockholders' equity	112,180	116,319
Noncontrolling interest	5,445	6,012
Total Equity	117,625	122,331
Total Liabilities and Stockholders' Equity	\$ 181,324	\$ 205,865

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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Operations
(Unaudited)
(in thousands, except per share data)

	Three Months Ended December 31,	
	2011	2010
Revenues, net of returns and allowances	\$ 24,728	\$ 53,712
Cost of sales	17,527	34,115
Gross profit	7,201	19,597
Selling, general and administrative	6,292	10,397
Research and development	2,753	848
Operating income (loss)	(1,844)	8,352
Interest and other income (expense), net	87	(30)
Income (loss) before income taxes	(1,757)	8,322
Income tax provision (benefit)	(320)	3,330
Net income (loss)	(1,437)	4,992
Add: Net Loss Attributable to noncontrolling interest	561	—
Net income (loss) attributable to Amtech Systems, Inc.	\$ (876)	\$ 4,992
Earnings (Loss) Per Share:		
Basic income (loss) per share attributable to Amtech shareholders	\$ (0.09)	\$ 0.54
Weighted average shares outstanding	9,446	9,278
Diluted income (loss) per share attributable to Amtech shareholders	\$ (0.09)	\$ 0.52
Weighted average shares outstanding	9,446	9,609

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

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AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements Of Cash Flows
(Unaudited)
(in thousands)

	Three Months Ended December 31,	
	2011	2010
Operating Activities		
Net income (loss)	\$ (1,437)	\$ 4,992
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	769	647
Write-down of inventory	20	499
Deferred income taxes	—	(2,075)
Non-cash stock based compensation expense	465	374
Provision for allowance for doubtful accounts	78	47
Changes in operating assets and liabilities:		
Restricted cash	(420)	3,495
Accounts receivable	10,128	(23,569)
Inventories	(1,886)	(3,476)
Accrued income taxes	(752)	2,469
Prepaid expenses and other assets	(251)	(1,838)
Accounts payable	(2,164)	3,678
Accrued liabilities and customer deposits	(5,757)	5,358
Deferred profit	(4,906)	5,098
Net cash used in operating activities	(6,113)	(4,301)
Investing Activities		
Purchases of property, plant and equipment	(465)	(609)
Net cash used in investing activities	(465)	(609)
Financing Activities		
Proceeds from issuance of common stock	—	1,223
Repurchase of common stock	(4,080)	—
Payments on long-term obligations	(11)	(31)
Excess tax benefit of stock options	—	727
Net cash provided by (used in) financing activities	(4,091)	1,919
Effect of Exchange Rate Changes on Cash	(1,777)	(566)
Net Increase (Decrease) in Cash and Cash Equivalents	(12,446)	(3,557)
Cash and Cash Equivalents, Beginning of Period	67,382	56,764
Cash and Cash Equivalents, End of Period	\$ 54,936	\$ 53,207
Supplemental Cash Flow Information:		
Income tax payments	\$ 422	\$ 2,168

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
THREE MONTHS ENDED DECEMBER 31, 2011 AND 2010
(UNAUDITED)

1. Basis of Presentation

Nature of Operations and Basis of Presentation – Amtech Systems, Inc. (the “Company”) designs, assembles, sells and installs capital equipment and related consumables used in the manufacture of solar cells, semiconductors and wafers of various materials, primarily for the solar and semiconductor industries. We are developing an ion implanter to provide our customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products worldwide, primarily in Asia, the United States and Europe. The Company serves markets in industries that are experiencing rapid technological advances, and which historically have been cyclical. Therefore, future profitability and growth depend on the Company’s ability to develop or acquire and market profitable new products, and on its ability to adapt to cyclical trends.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”), and consequently do not include all disclosures normally required by U.S. generally accepted accounting principles. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal and recurring nature, to present fairly our financial position, results of operations and cash flows. Certain information and note disclosures normally included in financial statements have been condensed or omitted pursuant to the rules and regulations of the SEC. These condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011.

The consolidated results of operations for the three months ended December 31, 2011, are not necessarily indicative of the results to be expected for the full fiscal year.

Principles of Consolidation – The consolidated financial statements include the accounts of the Company and its consolidated subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue Recognition – Revenue is recognized upon shipment of the Company’s proven technology equal to the sales price less the greater of (i) the fair value of undelivered services or (ii) the contingent portion of the sales price, which is generally 10-20% of the total contract price. The entire cost of the equipment relating to proven technology is recorded upon shipment. The remaining contractual revenue, deferred costs and installation costs are recorded upon the completion of installation at the customers’ premises and acceptance of the product by the customer.

For purposes of revenue recognition, proven technology means the Company has a history of at least two successful installations. New technology systems are those systems with respect to which the Company cannot demonstrate that it can meet the provisions of customer acceptance at the time of shipment. The full amount of revenue and costs of new technology shipments is recognized upon the completion of installation at the customers’ premises and acceptance of the product by the customer.

Revenue from services is recognized as the services are performed. Revenue from prepaid service contracts is recognized ratably over the life of the contract. Revenue from spare parts is recorded upon shipment.

Deferred Profit – Revenue deferred pursuant to the Company’s revenue recognition policy, net of the related deferred costs, if any, is recorded as deferred profit in current liabilities. The components of deferred profit are as follows:

	December 31, 2011		September 30, 2011		
	(dollars in thousands)				
Deferred revenues	\$	23,106	12,577	\$	29,666
Deferred costs		1,473	1,138		2,058
Deferred profit	\$	21,633		\$	27,608

Concentrations of Credit Risk – Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of trade accounts receivable and cash. The Company’s customers, located throughout the world, consist of manufacturers of solar cells, semiconductors, semiconductor wafers, LEDs and MEMS. Credit risk is managed by performing ongoing credit evaluations of the customers’ financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and its country of domicile. Reserves for potentially uncollectible receivables are maintained based on an assessment of collectability.

The Company maintains its cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States (approximately 30% of total cash balances) are primarily invested in US Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation (FDIC). The remainder of the Company’s cash is maintained in banks in The Netherlands, France and China that are uninsured.

As of December 31, 2011, one customer accounted for 19% of accounts receivable.

Restricted Cash – Restricted cash of \$6.9 million and \$6.6 million as of December 31, 2011 and September 30, 2011, respectively, includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment. Restricted cash as of December 31, 2011 and September 30, 2011 also includes \$4.0 million and \$4.3 million, respectively, in an escrow account related to the acquisition of Kingstone Technology Hong Kong Limited (Kingstone).

Accounts Receivable - Unbilled and Other – Unbilled and other accounts receivable consist mainly of the contingent portion of the sales price that is not collectible until successful installation of the product. These amounts are generally billed upon final customer acceptance. The majority of these amounts are offset by balances included in deferred profit. As of December 31, 2011, the unbilled and other includes \$1.0 million of Value Added Tax (VAT) receivables at our Netherlands operations and taxes that the Company has paid to its vendors that will be refunded to the Company by the government.

Inventories – Inventories are stated at the lower of cost or net realizable value. Approximately 80% of inventory is valued on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. The components of inventories are as follows:

	December 31, 2011		September 30, 2011		
	(dollars in thousands)				
Purchased parts and raw materials	\$	27,434	12,894	\$	24,925
Work-in-process		5,929	9,497		8,257
Finished goods		4,088	1,926		3,980
	\$	37,451		\$	37,162

Property, Plant and Equipment – Property, plant and equipment are recorded at cost. Maintenance and repairs are charged to expense as incurred. The cost of property retired or sold and the related accumulated depreciation are removed from the applicable accounts when disposition occurs and any gain or loss is recognized. Depreciation is computed using the straight-line method. Useful lives for equipment, machinery and leasehold improvements range from three to seven years; for furniture and fixtures from five to ten years; and for buildings twenty years.

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The following is a summary of property, plant and equipment:

	December 31, 2011	September 30, 2011
	(dollars in thousands)	
Land, building and leasehold improvements	\$ 10,549	\$ 10,636
Equipment and machinery	5,814	6,003
Furniture and fixtures	5,286	5,434
	21,649	22,073
Accumulated depreciation and amortization	(9,590)	(9,393)
	<u>\$ 12,059</u>	<u>\$ 12,680</u>

Goodwill - Goodwill is not subject to amortization and is reviewed for impairment on an annual basis, typically at the end of the fiscal year, or more frequently if circumstances dictate.

The following is a summary of activity in goodwill:

	Three Months Ended December 31, 2011
	(dollars in thousands)
Beginning balance	\$ 13,313
Goodwill recognized due to acquisition	—
Net exchange differences	(196)
Ending balance	<u>\$ 13,117</u>

Intangibles – Intangible assets are capitalized and amortized over their useful life if the life is determinable. If the life is not determinable, amortization is not recorded.

Long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

The following is a summary of intangibles:

	Useful Life	December 31, 2011	September 30, 2011
		(dollars in thousands)	
Non-compete agreements	4-8 years	\$ 1,058	\$ 1,066
Customer lists	10 years	834	876
Technology	5-10 years	2,353	2,436
Licenses	10 years	500	500
In-process research and development	(1)	1,600	1,600
Other	2-10 years	92	97
		6,437	6,575
Accumulated amortization		(1,699)	(1,554)
		<u>\$ 4,738</u>	<u>\$ 5,021</u>

- (1) The in-process research and development will be amortized over its useful life when it has reached technological feasibility.

Warranty – A limited warranty is provided free of charge, generally for periods of 12 to 24 months, for all purchases of the Company’s new products and systems. Accruals are recorded for estimated warranty costs at the time the system is accepted by the customer.

The following is a summary of activity in accrued warranty expense:

	Three Months Ended December 31,	
	2011	2010
(dollars in thousands)		
Beginning balance	\$ 2,265	\$ 1,843
Warranty expenditures	(330)	(254)
Warranty expense	378	425
Ending balance	<u>\$ 2,313</u>	<u>\$ 2,014</u>

Stock-Based Compensation - The Company measures compensation costs relating to share-based payment transactions based upon the grant-date fair value of the award. Those costs are recognized as expense over the requisite service period, which is generally the vesting period. The benefits of tax deductions in excess of recognized compensation cost are credited to additional paid-in capital and reported as cash flow from financing activities rather than as cash flow from operating activities. Our stock-based compensation plans are summarized in the table below:

Name of Plan	Shares Authorized	Shares Available	Options Outstanding	Plan Expiration
2007 Employee Stock Incentive Plan	1,400,000	342,987	696,859	Apr. 2017
1998 Employee Stock Option Plan	500,000	—	80,022	Jan. 2008
Non-Employee Directors Stock Option Plan	350,000	90,600	122,853	Jul. 2015
		<u>433,587</u>	<u>899,734</u>	

Share-based compensation expense reduced the Company’s results of operations by the following amounts:

	Three Months Ended December 31,	
	2011	2010
(dollars in thousands, except per share amounts)		
Effect on income before income taxes (1)	\$ (465)	\$ (374)
Effect on income taxes	117	167
Effect on net income	<u>\$ (348)</u>	<u>\$ (207)</u>

(1) Stock-based compensation expense is included in selling, general and administrative expenses.

Stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the common stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2021. Options issued by the Company vest over 2 to 5 years.

Stock option transactions and the options outstanding are summarized as follows:

	Three Months Ended December 31,			
	2011		2010	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of period	611,384	\$ 10.02	636,283	\$ 7.59
Granted	288,400	7.98	139,233	17.12
Exercised	(50)	6.15	(162,226)	7.54
Forfeited	—	—	(1,000)	6.93
Outstanding at end of period	<u>899,734</u>	<u>\$ 9.37</u>	<u>612,290</u>	<u>\$ 9.77</u>
Exercisable at end of period	<u>366,216</u>	<u>\$ 9.18</u>	<u>205,068</u>	<u>\$ 7.91</u>
Weighted average fair value of options granted during the period	\$ 4.95		\$ 10.77	

The fair value of options was estimated at the grant date using the Black-Scholes option pricing model with the following assumptions:

	Three Months Ended December 31,	
	2011	2010
Risk free interest rate	1.12%	1.67%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	70%	70%
Forfeiture rate	3%	4%

To estimate expected lives for this valuation, it was assumed that options will be exercised at varying schedules after becoming fully vested. Forfeitures have been estimated at the time of grant and will be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based upon historical experience. Fair value computations are highly sensitive to the volatility factor assumed; the greater the volatility, the higher the computed fair value of the options granted. The Company uses historical stock prices to determine the volatility factor.

The Company awards restricted shares under the existing share-based compensation plans. Our restricted share-awards vest in equal annual installments over a two to four-year period. The total value of these awards is expensed on a ratable basis over the service period of the employees receiving the grants. The “service period” is the time during which the employees receiving grants must remain employees for the shares granted to fully vest.

Restricted stock transactions and awards outstanding are summarized as follows:

	Three Months Ended December 31,			
	2011		2010	
	Awards	Weighted Average Grant Date Fair Value	Awards	Weighted Average Grant Date Fair Value
Beginning Outstanding	120,970	\$ 9.42	128,751	\$ 6.34
Awarded	60,600	7.98	35,517	17.28
Released	(47,014)	8.53	(37,376)	6.27
Forfeited	—	—	—	—
Ending Outstanding	134,556	\$ 9.09	126,892	\$ 9.43

Fair Value of Financial Instruments – Cash, Cash Equivalents and Restricted Cash - The carrying amount of these assets on the Company's Consolidated Balance Sheets approximates their fair value because of the short maturities of these instruments.

Receivables, Payables and Accruals—The recorded amounts of financial instruments, including accounts receivable, accounts payable, and accrued liabilities, approximate their fair value because of the short maturities of these instruments.

Pensions—The Company has retirement plans covering substantially all employees. The principal plans are defined contribution plans, except for the plans of the Company's operations in the Netherlands and France and the plan for hourly union employees in Pennsylvania. The Company's employees in the Netherlands, France and hourly union employees in Pennsylvania participate in multi-employer plans. Payments to the plans are recognized as an expense in the Consolidated Statement of Operations as they become due.

Shipping expense – Shipping expenses of \$0.6 million and \$1.1 million for the three months ended December 31, 2011 and 2010, respectively, are included in selling, general and administrative expenses.

Research and development expense – Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes; materials and supplies used in those activities; and product prototyping. The Company receives reimbursements through governmental research and development grants which are netted against these expenses. The table below shows gross research and development expenses and grants earned:

	Three Months Ended	
	December 31, 2011	December 31, 2010
	(dollars in thousands)	
Research and development	\$ 2,838	\$ 946
Grants earned	(85)	(98)
Net research and development	\$ 2,753	\$ 848

Impact of Recently Issued Accounting Pronouncements

In September 2011, the FASB issued ASU No. 2011-09, "Compensation - Retirement Benefits - Multiemployer Plans: Disclosures about an Employer's Participation in a Multiemployer Plan." The amendments in this Update require that employers provide additional separate disclosures for multiemployer pension plans and multiemployer other postretirement benefit plans. The amendment is effective for fiscal years and interim periods within those years, beginning after December 15, 2011. Upon adoption, the Company expects to provide the additional disclosures required by this amendment.

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income: Presentation of Comprehensive Income." The amendments require that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In the two-statement approach, the first statement should present total net income and its components followed consecutively by a second statement that should present total other comprehensive income, the components of other comprehensive income, and the total of comprehensive income. The amendment is effective for fiscal years and interim periods within those years, beginning after December 15, 2011. The Company expects to adopt the two-statement approach.

In May 2011, the FASB issued ASU No. 2011-04, "Fair Value Measurement: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IRFSs." The amendments in this Update explain how to measure fair value. They do not require additional fair value measurements and are not intended to establish valuation standards or affect valuation practices outside of financial reporting. The amendment is effective during interim and annual periods beginning after December 15, 2011. The Company is evaluating the impact of this amendment.

2. Income Taxes

The quarterly income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which the Company operates. However, losses in certain jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately.

Deferred tax assets and liabilities reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company records a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized. Our expectations regarding realization of our deferred tax assets is based upon the weight of all available evidence, including such factors as our recent earnings history and expected future taxable income. The Company maintains a valuation allowance with respect to certain state and foreign net operating losses that may not be recovered. Each quarter the valuation allowance is re-evaluated. The only significant change in the valuation allowance during the quarter ended December 31, 2011, was increasing a valuation allowance on the deferred tax assets in China for the current period net operating loss.

The Company classifies uncertain tax positions as non-current income taxes payable unless expected to be paid within one year. During the quarter ended December 31, 2011 a \$0.2 million uncertain tax position was resolved favorably. At December 31, 2011 and September 30, 2011, the total amount of unrecognized tax benefits was approximately \$1.9 million and \$2.0 million, respectively. If recognized, these amounts would favorably impact the effective tax rate.

The Company classifies interest and penalties related to unrecognized tax benefits in income tax expense. As of December 31, 2011, and September 20, 2011, the Company has an accrual for potential interest and penalties of approximately \$0.3 million and \$0.4 million, respectively.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, Germany, France, China and Hong Kong, as well as the U.S. and various states in the U.S. The Company and its subsidiaries have a number of open tax years dictated by statute in each of the respective taxing jurisdictions, which are generally from 3 to 5 years. These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations as they relate to the amount, timing, or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries. The IRS examination for fiscal year ending September 30, 2009 was completed in the first quarter of fiscal 2011 without adjustment.

3. Earnings Per Share

Basic earnings per share (EPS) is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic EPS.

For the three months ended December 31, 2011, options for 370,000 shares and 135,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the three months ended December 31, 2010, options for 139,000 shares and no restricted stock award shares were excluded from the diluted EPS calculations because they were anti-dilutive.

	Three Months Ended December 31,	
	2011	2010
	(in thousands, except per share amounts)	
Basic Earnings (Loss) Per Share Computation		
Net income (loss) attributable to Amtech Systems, Inc.	\$ (876)	\$ 4,992
Weighted Average Shares Outstanding:		
Common stock	9,446	9,278
Basic earnings (loss) per share attributable to Amtech shareholders	\$ (0.09)	\$ 0.54
Diluted Earnings (Loss) Per Share Computation		
Net income (loss) attributable to Amtech Systems, Inc.	\$ (876)	\$ 4,992
Weighted Average Shares Outstanding:		
Common stock	9,446	9,278
Common stock equivalents (1)	—	331
Diluted shares	9,446	9,609
Diluted earnings (loss) per share attributable to Amtech shareholders	\$ (0.09)	\$ 0.52

(1) The number of common stock equivalents is calculated using the treasury stock method and the average market price during the period.

4. Comprehensive Income (Loss)

	Three Months Ended December 31,	
	2011	2010
	(dollars in thousands)	
Net income (loss), as reported	\$ (1,437)	\$ 4,992
Foreign currency translation adjustment	(3,737)	(1,454)
Comprehensive income (loss)	(5,174)	3,538
Comprehensive loss attributable to noncontrolling interest	567	—
Comprehensive income (loss) attributable to Amtech Systems, Inc.	<u>\$ (4,607)</u>	<u>\$ 3,538</u>

5. Major Customers and Foreign Sales

During the three months ended December 31, 2011, one customer represented 10% of net revenues. During the three months ended December 31, 2010, three customers, individually, represented 17%, 12% and 10% of net revenues.

Our net revenues were to customers in the following geographic regions:

	Three Months Ended December 31,	
	2011	2010
Total North America	8%	7%
China	47%	58%
Taiwan	2%	19%
Other	19%	4%
Total Asia	68%	81%
Total Europe	24%	12%
	100%	100%

6. Commitments and Contingencies

Purchase Obligations – As of December 31, 2011, we had purchase obligations in the amount of \$32.7 million compared to \$47.2 million as of September 30, 2011. These purchase obligations consist of outstanding purchase orders for goods and services. While the amount represents purchase agreements, the actual amounts to be paid may be less if any agreements are renegotiated, canceled or terminated.

Litigation – The Company is a party to various claims arising in the normal course of business. Management believes the resolution of these matters will not have a material impact on the Company's results of operations or financial condition.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes included in Item 1, "Condensed Consolidated Financial Statements" in this quarterly report on Form 10-Q and our consolidated financial statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011.

Cautionary Statement Regarding Forward-Looking Statements

Certain information contained or incorporated by reference in this Quarterly Report on Form 10-Q is forward-looking in nature. All statements included or incorporated by reference in this Quarterly Report on Form 10-Q, or made by management of Amtech Systems, Inc. and its subsidiaries ("the Company" or "Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. Examples of forward-looking statements include statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of the Company and its management for future operations.

We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable. Achievement of future results is subject to risks, uncertainties and potentially inaccurate assumptions. The Form 10-K that we filed with the Securities and Exchange Commission for the year-ended September 30, 2011 listed various important factors that could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Risk Factors" in the Form 10-K and investors should refer to them. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

Introduction

Management's Discussion and Analysis ("MD&A") is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

- Overview
- Results of Operations
- Liquidity and Capital Resources
- Off – Balance Sheet Arrangements
- Contractual Obligations
- Critical Accounting Policies
- Impact of Recently Issued Accounting Pronouncements

Overview

We design, assemble, sell and install capital equipment and related consumables used in the manufacture of solar cells, semiconductors and wafers of various materials, primarily for the solar and semiconductor industries. We are developing a solar ion implanter to provide our customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products worldwide, primarily in Asia, the United States and Europe. The Company serves markets in industries that are experiencing rapid technological advances, and which historically have been cyclical. Therefore, future profitability and growth depend on the Company's ability to develop or acquire and market profitable new products, and on its ability to adapt to cyclical trends.

Results of Operations

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

	Three Months Ended	
	December 31, 2011	December 31, 2010
Net revenue	100 %	100%
Cost of goods sold	71 %	64%
Gross margin	29 %	36%
Operating expenses:		
Selling, general and administrative	25 %	19%
Research and Development	11 %	2%
Total operating expenses	36 %	21%
Income (loss) from operations	(7)%	15%
Interest income (expense), net	0 %	0%

Income (loss) before income taxes	(7)%	15%
Income taxes	(1)%	6%
Net Income (loss)	(6)%	9%
Add: net loss attributable to noncontrolling interest	2 %	0%
Net income (loss) attributable to Amtech Systems, Inc.	(4)%	9%

Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of products using proven technology and upon acceptance of products using new technology. In addition, spare parts sales are recognized upon shipment. Service revenue is recognized upon completion of the service activity or ratably over the term of the service contract. Since the majority of our revenue is generated from large furnace system sales, revenue and operating income can be significantly impacted by the timing of system shipments, the impact of revenue deferral on those shipments and recognition of revenue based on customer acceptances.

Net revenue for the quarters ended December 31, 2011 and 2010 was \$24.7 million and \$53.7 million, respectively, a decrease of \$29.0 million or 54%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar industry, partially offset by higher shipments to the semiconductor industry and increased recognition of previously-deferred revenue. Net revenue from the solar market was \$15.6 million and \$45.9 million for the three months ended December 31, 2011 and 2010, respectively; a \$30.3 million or 66% decrease. The current supply / demand imbalance and global economic conditions have negatively impacted the growth of the solar equipment market and have caused our customers to significantly slow or push out their capacity expansion plans. While the duration of this down cycle in the solar industry is difficult to predict, we continue to have a long-term positive outlook.

Backlog and Orders

Our order backlog as of December 31, 2011 and 2010 was \$69.2 million and \$172.9 million, respectively. Our backlog as of December 31, 2011 includes approximately \$55.8 million of orders and deferred revenue from our solar industry customers, compared to \$162.0 million at December 31, 2010. New orders booked in the quarter ended December 31, 2011 decreased to \$11.1 million compared to \$137.0 million in the quarter ended December 31, 2010 and \$16.8 million sequentially. As the majority of the backlog is denominated in Euros, the strengthening of the dollar during the first three months of fiscal 2012 resulted in a decrease in backlog of approximately \$3.1 million. As of December 31, 2011, one customer accounted for 26% of our order backlog. Our order pipeline has slowed significantly, due mainly to the worldwide, overcapacity of solar cell production. The pipeline is also negatively influenced by slower growth in demand for solar modules caused by the frequently-fluctuating government subsidies for solar energy installations.

The orders included in our backlog are generally credit approved customer purchase orders expected to ship within the next twelve

months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped, but which have not met the criteria for revenue recognition.

Gross Profit and Gross Margin

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment and spare parts and the cost of service and support to customers for installation, warranty and paid service calls. Gross margin is gross profit as a percent of net revenue.

Gross profit for the three months ended December 31, 2011 and 2010 was \$7.2 million and \$19.6 million, respectively; a decrease of \$12.4 million or 63%. Gross margins decreased to 29% in the quarter ended December 31, 2011 from 36% in the quarter ended December 31, 2010. Gross margins were negatively impacted primarily by lower sales volumes, resulting in less efficient capacity utilization, and lower average selling prices primarily due to product mix that includes research and development systems shipped to leading solar research institutes. The lower margins were significantly offset by increases in recognition of previously-deferred profit. In the quarter ended December 31, 2011, we had net profit recognition of \$4.9 million compared to net profit deferral of \$5.1 million in the quarter ended December 31, 2010.

Selling, General and Administrative

Selling, general and administrative expenses consist of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal and accounting expenses.

Selling, general and administrative (SG&A) expenses for the three months ended December 31, 2011 were \$6.3 million or 25% of revenue. For the three months ended December 31, 2010, SG&A expenses were \$10.4 million or 19% of revenue. SG&A expenses include \$0.5 million and \$0.4 million of stock-based compensation expense, respectively, for the quarters ended December 31, 2011 and 2010. The decrease in SG&A expenses was due primarily to lower commissions and shipping expenses related to lower revenues. In addition, SG&A decreased due to lower legal and consulting fees associated with our acquisition activities.

Research and Development

Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials and supplies used in producing prototypes. Reimbursement of research and development costs in the form of governmental research and development grants are netted against these expenses.

	Three Months Ended			
	December 31, 2011	December 31, 2010	Incr. (Decr.)	% change
	(dollars in thousands)			
Research and development	\$ 2,838	\$ 946	\$ 1,892	200%
Grants earned	(85)	(98)	13	13%
Net research and development	<u>\$ 2,753</u>	<u>\$ 848</u>	<u>\$ 1,905</u>	<u>225%</u>
Percent of net revenue	11%	2%		

Research and development costs for the three months ending December 31, 2011 increased \$1.9 million compared to the three months ending December 31, 2010. Increased research and development spending relates, in part, to investments in the development of a solar ion implanter. Additional investments were made in the development of other technologies and processes for solar (photovoltaic) cell manufacturing to increase throughput and cell efficiency. We receive reimbursements through governmental research and development grants which are netted against these expenses. We expect the continued development of an ion implanter and other technologies for the solar market to result in higher research and development expenses over the next two quarters.

Income Taxes

For the three months ended December 31, 2011 and 2010, we recorded income tax expense (benefit) of \$(0.3) million and \$3.3 million for effective tax rates of 18% and 40%, respectively. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). The tax benefit for the first quarter of fiscal 2012 includes the benefit realized from a

favorable resolution of an uncertain tax position. The income tax provision for the three months ended December 31, 2011 and 2010 are based upon estimates of annual income, annual permanent differences and statutory tax rates in the various jurisdictions in which we operate, except that certain loss jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately. No tax benefit has been recognized for losses related to Kingstone's ion implant development project, because it does not have a sufficient history of earnings to support a determination that realization of the tax benefit is more likely than not. Most of the tax benefit from losses in other jurisdictions was offset by taxes related to the restructure of our Netherlands operations.

Our future effective income tax rate depends on various factors, such as the geographic composition of worldwide earnings, tax regulations governing each region, non-tax deductible expenses incurred as a percent of pre-tax income and the effectiveness of our tax planning strategies. At the end of 2011, we restructured our European operations to lower the tax rate on the Netherlands operations from 35% to a marginal rate of 25%, as we intend to permanently reinvest future Dutch earnings in our foreign operations. The amount of benefit derived from that tax planning will depend on the amount of income earned in the Netherlands and the other factors mentioned above.

However, we expect our overall worldwide average effective tax to be higher in 2012 than in 2011. This is principally due to valuation allowances related to the net operating losses at Kingstone associated with increases in solar ion implanter development costs. Also, those valuation allowances are expected to represent a higher percentage of pre-tax income due to the anticipated decline in revenues. Our effective tax rate is expected to decline when: (1) we enter the next upturn in the solar industry; (2) we realize expected earnings from our investments in the ion implant technology; and (3) we resolve our uncertain tax positions.

Liquidity and Capital Resources

At December 31, 2011 and September 30, 2011, cash and cash equivalents were \$54.9 million and \$67.4 million, respectively. At December 31, 2011 and September 30, 2011, restricted cash was \$6.9 million and \$6.6 million, respectively. Restricted cash as of December 31, 2011, includes \$4.0 million in an escrow account for future funding of research and development expenses for ion implant technology at Kingstone Semiconductor Company Ltd. Our working capital was \$90.1 million as of December 31, 2011 and \$94.1 million as of September 30, 2011.

The decrease in cash for the first three months of fiscal 2012 was primarily due to cash used in operating activities of \$6.1 million, cash used in financing activities of \$4.1 million and a decrease in cash of \$1.8 million due to the effect of exchange rate changes on cash. The Company maintains a portion of our cash and cash equivalents in euros at our Netherlands and French operations, therefore, changes in the exchange rate have an impact on our cash balances. Cash used in operating, investing and financing activities is discussed below. Our ratio of current assets to current liabilities was 2.5:1 as of December 31, 2011 compared to 2.2:1 as of September 30, 2011.

During the remainder of fiscal 2012, we expect to make approximately \$17 million of income tax payments. See information below regarding other contractual obligations. We have never paid dividends on our Common Stock. Our present policy is to apply cash to investments in product development, acquisitions or expansion; consequently, we do not expect to pay dividends on Common Stock in the foreseeable future. We believe that our principal sources of liquidity discussed above are adequate to support operations for at least the next 12 months.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which include common and preferred stock sold in private transactions and public offerings, capital leases and long-term debt. There can be no assurance that we can raise such additional capital resources on satisfactory terms.

Cash Flows from Operating Activities

Cash used in our operating activities was \$6.1 million for the three months ended December 31, 2011, compared to \$4.3 million used in such activities for the three months ended December 31, 2010. During the three months ended December 31, 2011, \$0.3 million of cash was used as a result of the net loss from operations, adjusted for non-cash charges. Additional cash was used to reduce current liabilities, such as customer deposits, accounts payable, accrued compensation and deferred profit. These decreases in cash were partially offset by collections of accounts receivable.

Cash Flows from Investing Activities

Our investing activities for the three months ended December 31, 2011 and 2010 used \$0.5 million and \$0.6 million, respectively,

for purchases of property plant and equipment.

Cash Flows from Financing Activities

For the three months ended December 31, 2011 \$4.1 million was used to reacquire shares issued in connection with the Kingstone acquisition. For the three months ended December 31, 2010, the primary source of \$1.9 million of cash provided by financing activities was proceeds from the issuance of common stock through the exercise of stock options.

Off-Balance Sheet Arrangements

As of December 31, 2011, Amtech had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated by the Securities and Exchange Commission.

Contractual Obligations

Purchase obligations decreased \$14.5 million from \$47.2 million as of September 30, 2011 to \$32.7 million as of December 31, 2011. We also have a contractual obligation to fund the development of the solar tool at Kingstone. Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2011, for information on the Company's other contractual obligations.

Critical Accounting Policies

"Management's Discussion and Analysis of Financial Condition and Results of Operations" discusses our condensed consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the condensed consolidated financial statements, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period.

On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts and notes receivable collectability, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2011. We believe our critical accounting policies relate to the more significant judgments and estimates used in the preparation of our consolidated financial statements.

We believe the critical accounting policies discussed in the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011 represent the most significant judgments and estimates used in the preparation of our consolidated financial statements. There have been no significant changes in our critical accounting policies during the three months ended December 31, 2011.

Impact of Recently Issued Accounting Pronouncements

For discussion of the impact of recently issued accounting pronouncements, see "Item 1: Financial Information" under "Impact of Recently Issued Accounting Pronouncements".

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to foreign currency exchange rates to the extent sales contracts, purchase contracts, assets or liabilities of our operations are denominated in currencies other than their functional currency. Our operations in the United States are conducted in their functional currency, the U.S. dollar. Our operations in Europe and China conduct business primarily in their functional currencies, the Euro and renminbi, but occasionally enter into transactions in the U.S. dollar. It is highly uncertain how currency exchange rates will fluctuate in the future. Actual changes in foreign exchange rates could adversely affect our operating results or financial condition.

During fiscal 2011 and in the first quarter of fiscal 2012, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction gains or losses of less than \$0.1 million during the three months ended December 31, 2011 and 2010. As of December 31, 2011, our foreign subsidiaries had \$1.7 million of assets (cash and accounts receivable) denominated in currencies other than their functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of \$0.2 million. As of December 31, 2011, we had \$0.4 million of accounts payable, consisting primarily of amounts owed by our foreign subsidiaries to our U.S. companies, denominated in U.S. dollars. Although the intercompany accounts are eliminated in consolidation, a 10% change in the value of the Euro relative to the U.S. dollar would result in a gain or loss of less than \$0.1 million. The risk associated with foreign currency translation gains and losses has increased with our recent acquisition in China.

We incurred foreign currency translation losses of \$3.9 million and \$3.6 million during the three months ended December 31, 2011 and 2010, respectively, a type of other comprehensive income (loss), which is a direct adjustment to stockholders' equity. Our net investment in and advances to our foreign operations totaled \$84.2 million as of December 31, 2011. A 10% change in the value of the foreign currencies relative to the U.S. dollar would cause approximately \$8.4 million of other comprehensive income (loss). The risk associated with foreign currency translation adjustments has increased with our recent acquisition in China.

During three months ended December 31, 2011, our European operations transacted U.S. dollar denominated sales and purchases of \$1.4 million and \$11.1 million, respectively. As of December 31, 2011, sales commitments denominated in a currency other than the functional currency of our transacting operation totaled \$0.2 million. Our lead-times to fulfill these commitments generally range between 13 and 26 weeks. A 10% change in the relevant exchange rates between the time the order was taken and the time of shipment would not cause our gross profit on such orders to be significantly greater or less than expected on the date the order was taken. As of December 31, 2011, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled \$3.8 million. A 10% change in the relevant exchange rates between the time the purchase order was placed and the time the order is received would cause our cost of such items to be \$0.4 million greater or less than expected on the date the purchase order was placed.

Item 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2011, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place are effective.

Changes in Internal Control Over Financial Reporting

There has been no change in Amtech's internal control over financial reporting during the three months ended December 31, 2011 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1A. Risk Factors

The most significant risk factors applicable to Amtech are described in Part I, Item 1A (Risk Factors) of Amtech's Annual Report on Form 10-K for the fiscal year ended September 30, 2011 (our "2011 Form 10-K"). There have been no material changes to the risk factors previously disclosed on our fiscal 2011 Form 10-K.

Item 5. Other Information

(a)

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On February 9, 2012, the Company entered into a Second Amended and Restated Employment Agreement (the "Employment Agreement") with Jong S. Whang, the Company's Executive Chairman, amending the Amended and Restated Employment Agreement with Mr. Whang dated March 11, 2010 to reflect Mr. Whang's position with the Company as Executive Chairman, to increase his base salary to \$400,000 and to make various other revisions to be compliant with 409A of the Internal Revenue Code.

The foregoing description is qualified in its entirety by the text of the Employment Agreement, which is filed as Exhibit 10.1 hereto.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change of Fiscal Year.

On February 6, 2012, the Company filed with the Arizona Corporation Commission, or the AZCC, its Amended and Restated Articles of Incorporation which were fully restated to include all amendments to the Articles of Incorporation through the date of filing in addition to certain other administrative and conforming amendments therein. The Amended and Restated Articles became effective upon filing with the AZCC.

The Amended and Restated Articles are attached hereto as Exhibit 3.1. No shareholder approval was required in connection with these Amended and Restated Articles.

Item 6. Exhibits

3.1	Amended and Restated Articles of Incorporation	*
10.1	Second Amended and Restated Employment Agreement by and between Amtech Systems, Inc. and Jong S. Whang dated February 9, 2012.	*
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
101.INS	XBRL Instance Document	**
101.SCH	XBRL Taxonomy Extension Schema Document	**
101.PRE	Taxonomy Presentation Linkbase Document	**
101.CAL	XBRL Taxonomy Calculation Linkbase Document	**
101.LAB	XBRL Taxonomy Label Linkbase Document	**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	**

* Filed herewith.

** Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions or other liability provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. In addition, users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability under these sections.

SIGNATURES

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.

AMTECH SYSTEMS, INC.

By /s/ Robert T. Hass

Robert T. Hass

Vice President and Chief Accounting Officer

(Principal Accounting Officer)

Dated: February 9, 2012

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EXHIBIT INDEX

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AMENDED AND RESTATED
ARTICLES OF INCORPORATION
OF
AMTECH SYSTEMS, INC.

1. Name. The name of the corporation is Amtech Systems, Inc.
 2. Purpose. The purpose for which this corporation is organized is the transaction of any and all lawful business for which corporations may be incorporated under the laws of the State of Arizona, as they may be amended from time to time.
 3. Initial Purpose. The corporation initially intends to conduct the business of designing, developing, manufacturing, selling and otherwise dealing in glass transfer systems and all activities ancillary thereto.
 4. [Reserved].
 5. Authorized Capital. The authorized capital stock of the Corporation is two hundred million (200,000,000) shares divided into one hundred million (100,000,000) shares of common stock, \$.01 par value and one hundred million (100,000,000) shares of preferred stock. Each issued and outstanding share of common stock will entitle the holder thereof to one (1) vote on any matter submitted to a vote of or for contest of shareholders. Issued and outstanding shares of preferred stock will entitle the holders thereof only to those votes and other rights and preferences, if any, which may expressly be fixed as hereinafter provided for the respective series thereof. Subject to the terms and provisions of this Article, the Board of Directors is authorized to provide from time to time for the issuance of shares of preferred stock in series and to fix from time to time before issuance, the designation, preferences, privileges and voting powers of the shares of each series or preferred stock and the restrictions or qualifications thereof, including without limiting the generality of the foregoing, the following:
 - A. The series designation and authorized number of shares;
 - B. The dividend rate, if any, the date or dates of which such dividends will be payable,
-

and the extent to which such dividends may be cumulative;

C. The amount or amounts to be received by the holders in the event of voluntary or involuntary dissolution or liquidation of the corporation;

D. The price or prices at which shares may be redeemed and any terms, conditions, and limitations upon such redemption;

E. Any sinking fund provisions for redemption or purchase of shares of such series; and

F. The terms and conditions, if any, on which shares may be converted at the election of the holders thereof into shares of other capital stock, or of other series of preferred stock, of the corporation.

6. Stock Rights and Options for Officers, Directors and Employees. The corporation may issue rights and options to purchase shares of stock of the corporation to directors, officers, or employees of the corporation or of any affiliate thereof, and no shareholder approval or ratification of any such issuance or rights and options shall be required.

7. [Reserved].

8. Board of Directors. The initial Board of Directors shall consist of seven directors. Thereafter, the number of directors shall be as set by the Board of Directors in the By-laws from time to time.

9. Incorporators. The incorporators of this corporation are:

Jong S. Whang
15,618 North 49th Place
Scottsdale, Arizona 85254

Robert A. Bouchard
60 West 11th Drive
Mesa, Arizona 85202

Terry D. Holtz
3547 East Winchcomb Dr.
Phoenix, Arizona

Gar B. Olson
1613 West Nido Ave.
Mesa, Arizona 85202

Margaret M. Smith
North 26th Street
Mesa, Arizona 85203

James D. Arbogast
8,743 East Solando Drive
Scottsdale, Arizona 85253

Orrin Baysinger
Star Rt. 1 886B
Buckeye, Arizona

10. Distribution from Capital Surplus. The Board of Directors of the corporation may, from time to time, distribute on a pro-rata basis to its shareholders out of the capital surplus of the corporation, a portion of its assets, in cash or in property.

11. Indemnification of Officers, Directors, and Employees. Subject to the further provisions

hereof, the corporation shall indemnify any and all of its existing and former directors, officers, employees, and agents against all expenses incurred by them and each of them, including, but not limited to legal fees, judgments, penalties, and amounts paid in settlement or compromise, which may arise or be incurred, rendered, or levied in any legal action brought or threatened against any of them for or on account of any action or omission alleged to have been committed while acting within the scope of employment as director, officer, employee or agent of the corporation, whether or not any action is or has been filed against them and whether or not any settlement or compromise is approved by a court, indemnification shall be made by the corporation whether the legal action brought or threatened is by or in the right of the corporation or by any other person. Whenever any existing or former director, officer, employee, or agent shall report to the President of the corporation or the chairman of the Board of Directors that he or she has incurred or may incur expenses, including, but not limited to, legal fees, judgments, penalties, and amounts paid in settlement or compromise in a legal action brought or threatened against him or her for or on account of any action or omission alleged to have been committed by him or her while acting within the scope of his or her employment as a director, officer, employee or agent of the corporation, the Board of Directors shall, at its next regular or at a special meeting held within a reasonable time thereafter, determine in good faith, whether in regard to the matter involved in the action or contemplated action, such person acted, failed to act, or refused to act willfully or with gross negligence or with fraudulent or criminal intent. If the Board of Directors determines, in good faith, that such person did not act, fail to act, or refuse to act willfully or with gross negligence or with fraudulent or criminal intent in regard to the matter involved in the action or contemplated action, such person acted, failed to act, or refused to act willfully or with gross negligence or with fraudulent or criminal intent, indemnification shall be mandatory and shall be automatically extended as specified herein; provided, that the corporation shall have the right to refuse indemnification in any instance in which the person to whom indemnification would otherwise have been applicable shall have unreasonably refused to permit the corporation, at its own expense and through counsel of its own choosing, to defend him or her in the action.

12. Repurchase of Shares. The Board of Directors of the corporation may, from time to time,
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cause the corporation to purchase its own shares to the extent of the unreserved and unrestricted earned and capital surplus of the corporation.

13. Dividends. The Board of Directors may authorize the payment of dividends of holders of shares of any class of stock payable in shares of any other class.

14. Limitation of Director Liability. No director shall be personally liable to the corporation or its stockholders for monetary damages for breach of his or her fiduciary duty as director except for: (i) breaches of a director's duty of loyalty to the corporation; (ii) acts or omissions not in good faith or involving intentional misconduct or a knowing violation of law; (iii) acts arising from unlawful payments of dividends or unlawful stock purchase or redemption; or (iv) transactions from which a director derives an improper personal benefit. The provisions set forth above do not apply to acts or omissions occurring prior to the date of the adoption of this Article.

SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT

SECOND AMENDED AND RESTATED EMPLOYMENT AGREEMENT, dated this 9th day of February, 2012 (the "Agreement"), between Amtech Systems, Inc., an Arizona corporation (the "Company") with offices at 131 South Clark Drive, Tempe, Arizona, and Jong S. Whang (the "Executive"),

WITNESSETH:

WHEREAS, the Company and the Executive previously entered into an Amended and Restated Employment Agreement dated March 11, 2010 (the "Employment Agreement"); and

WHEREAS, on September 29, 2011, the Board of Directors of the Company elected the Executive to the position of Executive Chairman, effective January 1, 2012; and

WHEREAS, the Company and the Executive wish to conform the Employment Agreement to reflect those changes and make certain other changes to better reflect the intent of the parties, and as otherwise provided herein;

NOW, THEREFORE, the Company and the Executive hereby enter into an employment and compensation arrangement on the following terms and conditions:

- Employment.** Subject to the terms and conditions of this Agreement, the Company agrees to employ the Executive as its Executive Chairman during the Employment Period (as defined in Section 7) and Executive agrees to perform such acts and duties and furnish such services to the Company and its affiliates consistent with such position as the Company's Board of Directors shall from time to time direct. The Executive shall have general and active charge of the business and affairs of the Company and, in such capacity, shall have responsibility for the day-to-day operations of the Company, subject to the authority and control of the Board of Directors of the Company. During the Employment Period, the Company shall continue to take such actions as necessary to cause the Executive's nomination as a member of the Board of Directors of the Company. The Executive hereby accepts such employment and agrees to devote his full time and best efforts to the duties provided herein, provided, that the Executive may engage in other business activities which (i) involve no conflict of interest with the interests of the Company (subject to approval by the Board of Directors, which approval shall not be unreasonably withheld) and (ii) do not materially interfere with the performance by the Executive of his duties under this Agreement.
 - Compensation.** For services rendered to the Company during the term of this Agreement, the Company shall compensate the Executive with an initial base salary, payable in monthly installments, of \$400,000 per annum. Such base salary shall be reviewed on an annual basis by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") and shall be subject to being increased but not decreased in the discretion of the Compensation Committee.
 - Incentive Compensation.** The Executive shall also be entitled to annual cash bonuses for each fiscal year during the Employment Period ("Incentive Compensation"). The Executive's Incentive Compensation for each such fiscal year shall be determined in accordance with an annual bonus plan adopted by the Compensation Committee, which shall be no less favorable to the Executive than the bonus plan for fiscal 2010 adopted by the Compensation Committee on December 21, 2009.
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Any bonus due to Executive will be paid within 75 days after the end of the Company's fiscal year.

4. Stock Options.

(a) Outstanding Options and Restricted Stock. All currently outstanding options to purchase Common Stock of the Company and all restricted stock grants held by Executive shall remain in full force and effect in accordance with the provisions of Employer's stock option and restricted stock plans and the applicable Stock Option and Restricted Stock Agreements, as may be amended from time to time.

(b) New Options and Restricted Stock. As further compensation, Employee shall be issued an annual grant of stock options and restricted stock by the Compensation Committee within ninety (90) days after the end of each fiscal year during the Employment Period. The amount of such grant and the terms of vesting shall be as determined by the Compensation Committee, but shall be no less favorable to the Executive than the amounts and terms of the grant approved by the Compensation Committee on November 20, 2009. All of the stock options granted to Executive shall be "Incentive Stock Options" within the meaning of the Internal Revenue Code of 1986, as amended (the "Code"), subject to the limitations of the Code. Any stock options which are not allowed to be incentive stock options under the Code shall be non-qualified stock options. The stock options shall be issued at the fair market value of the Company's common stock as of the date of grant.

5. Benefits. During the Employment Period, the Company shall provide or cause to be provided to the Executive such employee benefits as are provided to other executive officers of the Company, including family medical, dental, vision, disability and life insurance, and participation in pension and retirement plans, incentive compensation plans, stock option plans, Company-sponsored welfare benefit plans for disability and life insurance and other benefit plans. During the Employment Period, the Company may provide or cause to be provided to the Executive such additional benefits as the Company may deem appropriate from time to time. The Company shall also provide the Executive with an annual automobile allowance of not less than \$14,000, as well as a life insurance policy in the face amount of \$500,000 with Executive's spouse as the beneficiary.

6. Vacation. The Executive shall be entitled to annual vacations in accordance with the Company's vacation policies in effect from time to time for executive officers of the Company.

7. Term: Employment Period. The "Employment Period" shall commence on the date of this Agreement (the "Effective Date") and shall continue for an initial term of three (3) years (the "Initial Term"). Thereafter, the Employment Period shall continue for successive one (1) year terms (the "Additional Terms") unless either the Company or the Executive provides written notice of termination of the Employment Period not less than one hundred twenty (120) days prior to the end of the Initial Term or any Additional Term (collectively, the "Term"), or unless earlier terminated pursuant to Section 8. If the Executive shall remain in the full time employ of the Company beyond the Employment Period without any written agreement between the parties, this Agreement shall be deemed to continue on a month to month basis and either party shall have the right to terminate this Agreement at the end of any ensuing calendar month on written notice of at least thirty (30) days.

8. Termination.

(a) Executive's employment with the company shall be "at will". Either the Company or the Executive may terminate this Agreement and Executive's employment at any time, with or without Cause

or Good Reason (as such terms are defined below), in its or his sole discretion, upon thirty (30) days prior written notice of termination.

(b) Without limiting the foregoing Section 8(a), (i) the Executive may terminate his employment with the company at any time for Good Reason, or (ii) the Company may terminate his employment at any time for Cause. "Good Reason" shall mean (i) the Company's failure to elect or reelect, or to appoint or reappoint, Executive to the office of Chief Executive Officer of the Company; (ii) material changes by the Company in the Executive's function, duties or responsibilities (including reporting responsibilities) of a scope less than that associated with the position of Chief Executive Officer of the Company; (iii) Executive's base salary is reduced by the Company below the highest base salary of Executive in effect during the Employment Period; (iv) relocation of Executive's principal place of employment to a place that is not within either the city limits of Tempe, Arizona, or within a radius of twenty (20) miles of his primary residence; (v) failure by the Company to obtain the assumption of this Agreement by any successor or assign of the Company; (vi) material breach of this Agreement by the Company, which breach is not cured within five (5) days after written notice thereof is delivered to the Company; or (vii) the occurrence of a Change of Control (as defined in Section 18). "Cause" shall mean (i) the Executive's willful, repeated or negligent failure to perform his duties hereunder and to comply with any reasonable or proper direction given by or on behalf of the Company's Board of Directors and the continuation of such failure following twenty (20) days written notice to such effect, (ii) the Executive being guilty of serious misconduct on the Company's premises or elsewhere, whether during the performance of his duties or not, which is reasonably likely to cause material damage to the reputation of the Company or render it materially more difficult for the Executive to satisfactorily continue to perform his duties and the continuation or a second instance of such serious misconduct following twenty (20) days written notice to such effect; (iii) the Executive being found guilty in a criminal court of any offense of a nature which is reasonably likely to materially adversely affect the reputation of the Company or to materially prejudice its interests if the Executive were to continue to be employed by the Company; (iv) the Executive's commission of any act of fraud or theft involving the Company or its business, or any intentional tort against the Company; or (v) the Executive's violation of any of the material terms, covenants, representations or warranties contained in this Agreement and failure to correct such violation within twenty (20) days after written notice by the Company. Notwithstanding the foregoing, "Cause" shall only be deemed to exist if it is so determined by a resolution duly adopted by the Board of Directors of the Company, at a duly noticed meeting at which the Executive and his counsel are first given the opportunity to address the Board with respect to such determination.

(c) "Disability" shall mean that the Executive, in the good faith determination of the Board of Directors of the Company, based on the advice of a qualified physician after a proper examination of the Executive, is unable, without reasonable accommodation, to render services of the character contemplated hereby and that such inability (i) may be expected to be permanent, or (ii) may be expected to continue for a period of at least six (6) consecutive months (or for shorter periods totaling more than six (6) months during any period of twelve (12) consecutive months). Termination resulting from Disability may only be effected after at least thirty (30) days written notice by the Company of its intention to terminate the Executive's employment.

(d) "Termination Date" shall mean any of the following and which termination is a "separation of service" within the meaning of Section 409A of the Code: (i) if this Agreement is terminated on account of death, the date of death; (ii) if this Agreement is terminated for Disability, the date established by the Company pursuant to Section 8(c) hereof; (iii) if this Agreement is terminated by the Company, the date on which a notice of termination is given to the Executive; (iv) if the Agreement is terminated by the Executive, the date the Executive ceases work; or (v) if this Agreement expires by its terms, the last day of the term of this Agreement. Notwithstanding the foregoing, if within thirty (30) days after any notice of

termination is given, the party receiving such notice notifies the other party that a dispute exists concerning the termination, the Termination Date shall be the date finally determined to be the Termination Date, either by mutual written agreement of the parties or by binding arbitration in the manner provided in Section 23 hereof; provided that the Termination Date shall be extended by a notice of dispute only if such notice is given in good faith and the party giving such notice pursues the resolution of such dispute with reasonable diligence. Notwithstanding the pendency of any such dispute, the Company will continue to pay the Executive his full compensation in effect when the notice giving rise to the dispute was given and continue the Executive as a participant in all compensation, benefit and insurance plans in which he was participating when the notice giving rise to the dispute was given, until the dispute is finally resolved. Amounts paid under this Section 8(d) shall be in addition to all other amounts due under this Agreement and shall not be offset against or reduce any amounts due under this Agreement; provided, however, that if the arbitrator determines that any notice of dispute by the Executive was not given in good faith or that the Executive did not pursue the resolution of such dispute with reasonable diligence, the Executive shall repay the Company the amount of compensation paid to the Executive pursuant to Section 8(d) from the Termination Date which would have applied had such notice of dispute not been given, plus interest thereon at the applicable federal rate provided for in Section 1274(d) of the Code, or any successor provision thereof, for an obligation with a term equal to the period from the date of payment to the date of repayment pursuant to this Section 8(d).

9. Severance:

(a) If (i) the Company terminates the employment of the Executive against his will and without Cause (including by giving notice of termination of the Agreement pursuant to Section 7), or (ii) the Executive terminates his employment for Good Reason, the Executive shall be entitled to receive salary, Incentive Compensation and vacation accrued through the Termination Date, plus the following:

- (i) a cash lump sum in an amount equal to the greater of the Executive's base salary for the remainder of the Initial Term or two years of Executive's base salary in effect on the Termination Date;
- (ii) a cash lump sum equal to the maximum amount of the Incentive Compensation which Executive could earn for the fiscal year in which the Termination Date occurs (the "Maximum Incentive Compensation"); and
- (iii) full vesting of all outstanding stock options and restricted stock held by Executive.

The Company shall make the termination payment required hereunder within thirty (30) days of the Termination Date; provided, however, if such thirty (30) day period begins in one calendar year and ends in another calendar year, the Executive will not have the right to designate the calendar year of payment.

In addition, the Company and the Executive agree that, upon such termination and for a period of two (2) years following the Termination Date, (i) Executive will make himself available for an average of 20 hours per week in order to consult with the Company in such manner and on such matters as the Company shall reasonably request, (ii) Executive will make himself available to serve on the Board of Directors of the Company, and (iii) in consideration for the Executive's agreement to perform such services, the Company will (A) pay the Executive an annual amount equal to 40% of his base salary in effect on the Termination Date, payable in regular installments in accordance with the Company's standard payroll practices, and (B) include the Executive in the Company's Family medical, dental and vision insurance plans, or, if the Executive's inclusion in such plans is not permitted, provide substantially the same benefits to the Executive at the Company's expense.

Notwithstanding the foregoing, the Company shall not be required to pay any severance pay or consulting

payments for any period following the Termination Date if the Executive violates the provisions of Section 15, Section 16 or Section 17 of this Agreement in any material respect, and fails to cure such violation within thirty (30) days after written notice from the Company to the Executive detailing such violation.

For purposes of Section 409A of the Code, Company and Executive agree that Executive will be treated as incurring a separation from service as of the date that both parties reasonably expect that Executive's level of continuing service to the Company will be reduced to a level that is 49 percent or less of Executive's level of services for the twelve-month period preceding Executive's separation from service. As of the Effective Date, Executive and Company believe that a level of services of 20 hours per week for Executive will satisfy this standard.

(b) If (i) the Executive voluntarily terminates his employment other than for Good Reason, (ii) the Executive's employment is terminated due to death or Disability, or (iii) the Executive is terminated by the Company for Cause, then the Executive shall be entitled to receive his base salary and accrued vacation through the Termination Date only. In the event of death or Disability the Executive shall also be entitled to receive the Pro-Rated Incentive Compensation and full vesting of all outstanding stock options and restricted stock held by the Executive, subject to the same terms and conditions as provided in Section 9(a).

(c) In addition to the provisions of Section 9(a) and 9(b) hereof, to the extent COBRA shall be applicable to the Company or as provided by law, the Executive shall be entitled to continuation of group health plan benefits in accordance with COBRA if the Executive makes the appropriate conversion and payments. If requested to do so, the Company will transfer ownership of the life insurance policy referred to in Section 5 to the Executive or his designee, at such time and in such a manner as to minimize any adverse tax consequences to the Executive and the Executive agrees to pay for any costs related to the transfer in excess of \$1000 and to be responsible for all future premiums. Any such transfer must occur within the 90-day period following the Executive's separation from service and, if such 90-day period begins in one calendar year and ends in another, the Executive may not select in which taxable year such transfer will occur.

(d) The Executive acknowledges that, upon termination of his employment, he is entitled to no other compensation, severance or other benefits other than those specifically set forth in this Agreement or any applicable Stock Option Agreement, or pursuant to any Applicable Benefit Plan.

(e) All payments to be made to the Executive that are subject to Section 409A upon a termination of employment may only be made upon a "separation from service" (within the meaning of Section 409A) of the Executive. For purposes of Section 409A, (i) each payment made under this Agreement shall be treated as a separate payment; (ii) the Executive may not, directly or indirectly, designate the calendar year of payment; and (iii) no acceleration of the time and form of payment of any nonqualified deferred compensation to the Executive or any portion thereof, shall be permitted.

(f) Notwithstanding anything contained in this Agreement to the contrary, if at the time of the Executive's "separation from service" (as defined in Section 409A of the Code) the Executive is a "specified employee" (within the meaning of Section 409A and the Company's specified employee identification policy) and if any payment, reimbursement and/or in-kind benefit that constitutes nonqualified deferred compensation (within the meaning of Section 409A) is deemed to be triggered by the Executive's separation from service, then, to the extent one or more exceptions to Section 409A are inapplicable (including, without limitation, the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) relating to separation pay due to an involuntary separation from service and its requirement that installments must be paid no later than the last day of the second taxable year following the taxable year in which such an employee incurs the involuntary separation from service), all payments, reimbursements, and in-kind benefits that constitute

nonqualified deferred compensation (within the meaning of Section 409A) to the Executive shall not be paid or provided to the Executive during the six-month period following the Executive's separation from service, and (i) such postponed payment and/or reimbursement/in-kind amounts shall be paid to the Executive in a lump sum within thirty (30) days after the date that is six (6) months following the Executive's separation from service; (ii) any amounts payable to the Executive after the expiration of such six- (6-) month period shall continue to be paid to the Executive in accordance with the terms of this Agreement; and (iii) to the extent that any group hospitalization plan, health care plan, dental care plan, life or other insurance or death benefit plan, and any other present or future similar group executive benefit plan or program or any lump sum cash out thereof is nonqualified deferred compensation (within the meaning of Section 409A), the Executive shall pay for such benefits from his Termination Date until the first day of the seventh month following the month of the Executive's separation from service, at which time the Company shall reimburse the Executive for such payments. If the Executive dies during such six- (6-) month period and prior to the payment of such postponed amounts of nonqualified deferred compensation, only the amount of nonqualified deferred compensation equal to the number of whole months that the Executive lived shall be paid in a lump sum to the Executive's estate or, if applicable, to the Executive's designated beneficiary within thirty (30) days after the date of the Executive's death.

10. Expenses; Reimbursements and In-Kind Benefits. The Company shall pay or reimburse the Executive for all expenses normally reimbursed by Company, reasonably incurred by him in furtherance of his duties hereunder and authorized and approved by the Company in compliance with such rules relating thereto as the Company may, from time to time, adopt and as may be required in order to permit such payments as proper deductions to Company under the Code, and the rules and regulations adopted pursuant thereto now or hereafter in effect.

Notwithstanding any other provision of the applicable plans and programs, all reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) the amount of expenses eligible for reimbursement and the provision of benefits in kind during a calendar year shall not affect the expenses eligible for reimbursement or the provision of in-kind benefits in any other calendar year; (ii) the reimbursement for an eligible expense will be made on or before the last day of the calendar year following the calendar year in which the expense is incurred; (iii) the right to reimbursement or right to in-kind benefit is not subject to liquidation or exchange for another benefit; and (iv) each reimbursement payment or provision of in-kind benefit shall be one of a series of separate payments (and each shall be construed as a separate identified payment) for purposes of Section 409A of the Code.

11. Facilities and Services. The Company shall furnish the Executive with office space, secretarial and support staff and such other facilities and services as shall be reasonably necessary for the performance of his duties under this Agreement.

12. Mitigation Not Required. In the event this Agreement is terminated, the Executive shall not be required to mitigate amounts payable pursuant hereto by seeking other employment or otherwise. The Executive's acceptance of any such other employment shall not diminish or impair the amounts payable to the Executive pursuant hereto.

13. Place of Performance. The Executive shall perform his duties primarily in Tempe, Arizona or locations within a reasonable proximity thereof, except for reasonable travel as the performance of the Executive's duties may require.

14. Insurance and Indemnity. During the Employment Period, if available at reasonable costs,

the Company shall maintain, at its expense, officers and directors fiduciary liability insurance covering the Executive and all other executive officers and directors in an amount of no less than \$5,000,000. The Company shall also indemnify the Executive, to the fullest extent permitted by law, from any liability asserted against or incurred by the Executive by reason of the fact that the Executive is or was an officer or director of the Company or any affiliate or related party or is or was serving in any capacity at the request of the Company for any other corporation, partnership, joint venture, trust, employment benefit plan or other enterprise. This indemnity shall survive termination of this Agreement.

15. Noncompetition.

(a) The Executive agrees that, except in accordance with his duties under this Agreement on behalf of the Company, he will not during the term of this Agreement:

Participate in, be employed in any capacity by, serve as director, consultant, agent or representative for, or have any interest, directly or indirectly, in any enterprise which is engaged in the business of distributing, selling or otherwise trading in products or services which are competitive to any products or services distributed, sold or otherwise traded in by the Company or any of its subsidiaries during the term of the Executive's employment with the Company, or which are competitive to any products or services being actively developed, with the bona fide intent to market same, by the Company or any of its subsidiaries during the term of the Executive's employment with the Company;

In addition, the Executive agrees that for a period of two years after the end of the term of this Agreement (unless the Company breaches this Agreement by failing to pay to the Executive all sums due him under the terms hereof, in which event the following provisions of this Section 15.A shall be inapplicable), the Executive shall observe the covenants set forth in this Section 15 and shall not own, either directly or indirectly or through or in conjunction with one or more members of his or his spouse's family or through any trust or other contractual arrangement, a greater than five percent (5%) interest in, or otherwise control either directly or indirectly, any partnership, corporation, or other entity which distributes, sells, or otherwise trades in products which are competitive to any products or services being developed, distributed, sold, or otherwise traded in by the Company or any of its subsidiaries, during the term of this Agreement, or being actively developed by the Company or any of its subsidiaries during the term of this Agreement with the Company with a bona fide intent to market same. Executive further agrees, for such two-year period following termination, to refrain from directly or indirectly soliciting Company's vendors, customers or employees, except that the Executive may solicit the Company's vendors or customers in connection with a business that does not compete with the Company or any of its subsidiaries.

The Executive hereby agrees that damages and any other remedy available at law would be inadequate to redress or remedy any loss or damage suffered by the Company upon any breach of the terms of this Section 15 by the Executive, and the Executive therefore agrees that the Company, in addition to recovering on any claim for damages or obtaining any other remedy available at law, also may enforce the terms of this section 15 by injunction or specific performance, and may obtain any other appropriate remedy available in equity.

16. Assignment of Patents. Executive shall disclose fully to the Company any and all discoveries and any and all ideas, concepts or inventions relating to the Company's business as described in the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission) which he

shall conceive or make during his period of employment, or during the period of six months after his employment shall terminate, which are in whole or in part the result of his work with the Company. Such disclosure is to be made promptly after each such discovery or conception, and each such discovery, idea, concept or invention will become and remain the property of the Company, whether or not patent applications are filed thereon. Upon request and at the expense of the Company, the Executive shall make application through the patent solicitors of the Company for letters patent of the United States and any and all other countries at the discretion of the Company on such discoveries, ideas and inventions, and to assign all such applications to the Company, or at its order, forthwith, without additional payment by the Company during his period of employment and for reasonable compensation for time actually spent by the Executive at such work at the request of the Company after the termination of the employment. Executive shall give the Company, its attorneys and solicitors, all reasonable assistance in preparing and prosecuting such applications and, on request of the Company, execute all papers and do all things that may be reasonably necessary to protect the right of the Company and vest in it or its assigns the discoveries, ideas or inventions, applications and letters patent herein contemplated. Said cooperation shall also include all actions reasonably necessary to aid the Company in the defense of its rights in the event of litigation.

17. Trade Secrets.

(a) In the course of the term of this Agreement, it is anticipated that the Executive shall have access to secret or confidential technical and commercial information, records, data, specifications, systems, methods, plans, policies, inventions, material and other knowledge ("Confidential Material") owned by the Company and its subsidiaries. The Executive recognizes and acknowledges that included within the Confidential Material are the Company's confidential commercial information, technology, methods of manufacture, designs, and any computer programs, source codes, object codes, executable codes and related materials, all as they may exist from time to time, and that they are valuable special and unique aspects of the Company's business. All such Confidential material shall be and remain the property of the Company. Except as required by his duties to the Company, the Executive shall not, directly or indirectly, either during the term of his employment or at any time thereafter, disclose or disseminate to anyone or make use of, for any purpose whatsoever, any Confidential Material. Upon termination of his employment, the Executive shall promptly deliver to the Company all Confidential Material (including all copies thereof, whether prepared by the Executive or others) which are in the possession or under the control of the Executive. The Executive shall not be deemed to have breached this Section 17 if the Executive shall be specifically compelled by lawful order of any judicial, legislative, or administrative authority or body to disclose any Confidential Material or else face civil or criminal penalty or sanction.

(b) The Executive hereby agrees that damages and any other remedy available at law would be inadequate to redress or remedy any loss or damage suffered by the Company upon any breach of the terms of this Section 17 by the Executive, and the Executive therefore agrees that the Company, in addition to recovering on any claim for damages or obtaining any other remedy available at law, also may enforce the terms of this Section 17 by injunction or specific performance, and may obtain any other appropriate remedy available in equity.

18. Provisions After Change of Control.

(a) In the event Executive's employment with the Company is terminated (other than as a consequence of death or Disability) either (x) by the Company for any reason other than for Cause during a Pending Change of Control (as hereinafter defined) or within one year following the occurrence of a Change of Control, or (y) by Executive for Good Reason within one year following the occurrence of a Change of Control, then Executive shall be entitled to receive from the Company, in lieu of the severance payment

otherwise payable pursuant to Section 9(a), the following:

- (i) a cash lump sum equal to three years of Executive's base salary in effect on the Termination Date;
- (ii) the Maximum Incentive Compensation; and
- (iii) full vesting of all outstanding stock options and restricted stock held by Executive.

The Company shall make the termination payments required hereunder within thirty (30) days of the Termination Date; provided, however, if such thirty (30) day period begins in one calendar year and ends in another calendar year, Executive will not have the right to designate the calendar year of payment.

(b) For purposes of this Agreement, the term "Change of Control" shall mean:

(i) The acquisition, other than from the Company, by any individual, entity or group (within the meaning of Rule 13d-3 promulgated under the Exchange Act or any successor provision) (any of the foregoing described in this Section 18 (b)(i) hereafter a "Person") of 20% or more of either (a) the then outstanding shares of Capital Stock of the Company (the "Outstanding Capital Stock") or (b) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Voting Securities"), provided, however, that any acquisition by (x) the Company or any of its subsidiaries, or any employee benefit plan (or related trust) sponsored or maintained by the Company or any of its subsidiaries or (y) any Person that is eligible, pursuant to Rule 13d-1 (b) under the Exchange Act, to file a statement on Schedule 13G with respect to its beneficial ownership of Voting Securities, whether or not such Person shall have filed a statement on Schedule 13G, unless such Person shall have filed a statement on Schedule 13D with respect to beneficial ownership of 35% or more of the Voting Securities or (z) any corporation with respect to which, following such acquisition, more than 60% respectively, the then outstanding shares of common stock of such corporation and the combined voting power of the then outstanding voting securities of such corporation entitled to vote generally in the election of directors is then beneficially owned, directly or indirectly, by all or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Capital Stock and Voting Securities immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the Outstanding Capital Stock and Voting Securities, as the case may be, shall not constitute a Change of Control; or

(ii) Individuals who, as of the Effective Date, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board, provided that any individual becoming a director subsequent to the date hereof whose election or nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office is in connection with an actual or threatened election contest relating to the election of the Directors of the Company (as such terms are used in Rule 14a-11 of Regulation 14A, or any successor section, promulgated under the Exchange Act); or

(iii) Approval by the shareholders of the Company of a reorganization, merger or consolidation (a "Business Combination"), in each case, with respect to which all or substantially all holders of the Outstanding Capital Stock and Voting Securities immediately prior to such Business Combination do not, following such Business Combination, beneficially own, directly or indirectly, more than 60% of,

respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from the Business Combination; or

(iv) (a) a complete liquidation or dissolution of the Company or (b) a sale or other disposition of all or substantially all of the assets of the Company other than to a corporation with respect to which, following such sale or disposition, more than 60% of respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors is then owned beneficially, directly or indirectly, by all or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Capital Stock and Voting Securities immediately prior to such sale or disposition in substantially the same proportion as their ownership of the Outstanding Capital Stock and Voting Securities, as the case may be, immediately prior to such sale or disposition.

(v) The first purchase under a tender offer or exchange offer for 20% or more of the outstanding shares of stock (or securities convertible into stock) of the Company, other than an offer by the Company or any of its subsidiaries or any employee benefit plan sponsored by the Company or any of its subsidiaries.

(c) For purposes of this Agreement, the term "Pending Change of Control" shall mean the occurrence of one of the following events as the result of which a Change in Control pursuant thereto is reasonably expected within ninety (90) days after the date of determination as to whether there is a Pending Change in Control: (i) the Company executes a letter of intent, term sheet or similar instrument with respect to a transaction or series of transactions, the consummation of which would result in a Change of Control; (ii) the Board approves a transaction or series of transactions, the consummation of which would result in a Change of Control; (iii) a Person makes a public announcement of a tender offer for the Common Stock of the Company, the consummation of which would result in a Change of Control; or (iv) a Person makes a public announcement of, or makes a public filing with respect to, the intention of that Person to seek to change the membership of the Board of Directors of the Company in a manner that would result in a Change of Control. A Pending Change of Control shall cease to exist upon a Change of Control.

19. Notices. Any notice required or permitted to be given under this Agreement shall be sufficient if in writing and if sent by registered or certified mail, return receipt requested to his residence in the case of the Executive, or to its principal office in the case of the Company, or to such other addresses as they may respectively designate in writing.

20. Entire Agreement; Waiver. This Agreement contains the entire understanding of the parties and may not be changed orally but only by an agreement in writing, signed by the party against whom enforcement of any waiver, change, modification or discharge is sought. Waiver of or failure to exercise any rights provided by this Agreement in any respect shall not be deemed a waiver of any further or future rights.

21. Binding Effect; Assignment. The rights and obligations of this Agreement shall bind and inure to the benefit of any successor of the Company by reorganization, merger or consolidation, or any assignee of all or substantially all of the Company's business or properties. The Executive's rights hereunder are personal to and shall not be transferable nor assignable by the Executive.

22. Headings. The headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

23. Governing Law; Arbitration. This Agreement shall be construed in accordance with and governed for all purposes by the laws and public policy of the State of Arizona applicable to contracts executed and to be wholly performed within such state. Any dispute or controversy arising out of or relating to this Agreement shall be settled by arbitration in accordance with the rules of the American Arbitration Association and judgment upon the award may be entered in any court having jurisdiction thereover. The arbitration shall be held in Maricopa County or in such other place as the parties hereto may agree.

24. Further Assurances. Each of the parties agrees to execute, acknowledge, deliver and perform, and cause to be executed, acknowledged, delivered and performed, at any time and from time to time, all such further acts, deeds, assignments, transfers, conveyances, powers of attorney and/or assurances as may be necessary or proper to carry out the provisions or intent of this Agreement.

25. Severability. The parties agree that if any one or more of the terms, provisions, covenants or restrictions of this Agreement shall be determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

26. Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement.

IN WITNESS WHEREOF, AMTECH SYSTEMS, INC. has caused by instrument to be signed by a duly authorized officer and the Executive has hereunto set his hand the day and year first above written.

AMTECH SYSTEMS, INC.

By /s/ Robert T. Hass /s/ J. S. Whang
Robert T. Hass Jong S. Whang, Executive
Vice President and Chief Accounting Officer

Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Fokko Pentinga, certify that:

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

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: February 9, 2012

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Bradley C. Anderson, certify that:

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

By /s/ Bradley C. Anderson

Bradley C. Anderson

Executive Vice President – Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: February 9, 2012

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended December 31, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fokko Pentinga, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: February 9, 2012

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended December 31, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bradley C. Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sections 1350, as adopted pursuant to sections 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By /s/ Bradley C. Anderson

Bradley C. Anderson

Executive Vice President-Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: February 9, 2012

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.