UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended: June 30, 2013

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. [X] 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). [X] 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 [x]
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 [X]

Shares of Common Stock outstanding as of August 1, 2013: 9,539,234

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)

	June 30, 2013	September 30, 2012
	(Unaudited)	
Assets		
Current Assets		
Cash and cash equivalents	$ 38,814	$ 46,726
Restricted cash	5,073	4,644
Accounts receivable		
Trade (less allowance for doubtful accounts of $751 and $517 at June 30, 2013 and September 30, 2012, respectively)	7,333	7,486
Unbilled and other	4,533	10,807
Inventories	17,533	25,670
Deferred income taxes	1,640	3,460
Prepaid income taxes	1,400	1,400
Other	1,808	2,650
Total current assets	78,134	102,843
Property, Plant and Equipment - Net	11,155	12,387
Deferred Income Taxes -Long Term	1,010	470
Intangible Assets - Net	3,604	4,096
Goodwill	8,384	8,355
Other Assets - Long Term	1,168	871
Total Assets	$ 103,455	$ 129,022

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)

	June 30, 2013 (Unaudited)	September 30, 2012
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	$ 2,767	$ 5,780
Accrued compensation and related taxes	3,968	5,311
Accrued warranty expense	1,766	2,687
Deferred profit	4,301	10,236
Customer deposits	3,597	3,958
Other accrued liabilities	10,169	7,499
Income taxes payable	7,120	7,140
Total current liabilities	33,688	42,611
Income Taxes Payable Long-term	2,360	2,360
Total liabilities	36,048	44,971
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: 9,539,234 and 9,483,588 at June 30, 2013 and September 30, 2012, respectively	95	95
Additional paid-in capital	79,689	77,377
Accumulated other comprehensive loss	(6,163)	(6,817)
Retained Earnings (Deficit)	(6,321)	12,065
Total stockholders' equity	67,300	82,720
Noncontrolling interest	107	1,331
Total Equity	67,407	84,051
Total Liabilities and Stockholders' Equity	$ 103,455	$ 129,022

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

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

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2013	**2012**	**2013**	**2012**
Revenues, net of returns and allowances	$ 10,398	$ 24,300	$ 27,873	$ 70,594
Cost of sales	8,648	17,146	22,639	50,861
Write-down of inventory	4,427	2,350	4,080	3,680
Gross profit	(2,677)	4,804	1,154	16,053
Selling, general and administrative	5,443	6,360	13,682	18,698
Restructuring and impairment charges	182	—	879	688
Research and development	1,947	3,694	5,055	9,746
Operating loss	(10,249)	(5,250)	(18,462)	(13,079)
Interest and other income, net	143	69	187	195
Loss before income taxes	(10,106)	(5,181)	(18,275)	(12,884)
Income tax provision (benefit)	2,560	(1,110)	1,280	(1,650)
Net loss	(12,666)	(4,071)	(19,555)	(11,234)
Add: Net loss attributable to noncontrolling interest	565	1,106	1,169	2,314
Net loss attributable to Amtech Systems, Inc.	$ (12,101)	$ (2,965)	$ (18,386)	$ (8,920)
Loss Per Share:				
Basic loss per share attributable to Amtech shareholders	$ (1.27)	$ (0.31)	$ (1.93)	$ (0.94)
Weighted average shares outstanding	9,539	9,479	9,524	9,468
Diluted loss per share attributable to Amtech shareholders	$ (1.27)	$ (0.31)	$ (1.93)	$ (0.94)
Weighted average shares outstanding	9,539	9,479	9,524	9,468

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Condensed Consolidated Statements Of Comprehensive Income (Loss)
(Unaudited)
(in thousands)

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2013	**2012**	**2013**	**2012**
Net loss	$ (12,666)	$ (4,071)	$ (19,555)	$ (11,234)
Foreign currency translation adjustment	676	(3,851)	599	(5,380)
Comprehensive loss	(11,990)	(7,922)	(18,956)	(16,614)
Comprehensive loss attributable to noncontrolling interest	603	1,106	1,224	2,314
Comprehensive loss attributable to Amtech Systems, Inc.	$ (11,387)	$ (6,816)	$ (17,732)	$ (14,300)

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

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

	Nine Months Ended June 30, 2013	Nine Months Ended June 30, 2012
Operating Activities		
Net loss	$ (19,555)	$ (11,234)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,014	2,255
Write-down of inventory	4,080	3,680
Deferred income taxes	1,287	(4)
Impairment of long-lived assets	—	688
Non-cash stock based compensation expense	2,313	1,341
Provision for allowance for doubtful accounts	305	194
Changes in operating assets and liabilities:		
Restricted cash	(374)	3,025
Accounts receivable	6,334	12,504
Inventories	3,591	(2,751)
Accrued income taxes	(12)	(5,931)
Prepaid expenses and other assets	570	1,485
Accounts payable	(3,070)	(2,518)
Accrued liabilities and customer deposits	597	(5,401)
Deferred profit	(6,079)	(14,847)
Net cash used in operating activities	(7,999)	(17,514)
Investing Activities		
Purchases of property, plant and equipment	(156)	(1,229)
Other	—	(239)
Net cash used in investing activities	(156)	(1,468)
Financing Activities		
Proceeds from the issuance of common stock	—	3
Repurchase of common stock	—	(4,080)
Payments on long-term obligations	—	(30)
Net cash used in financing activities	—	(4,107)
Effect of Exchange Rate Changes on Cash	243	(1,967)
Net Decrease in Cash and Cash Equivalents	(7,912)	(25,056)
Cash and Cash Equivalents, Beginning of Period	46,726	67,382
Cash and Cash Equivalents, End of Period	$ 38,814	$ 42,326
Supplemental Cash Flow Information:		
Income tax payments	$ 21	$ 5,030
Income tax refunds	$ 18	$ 913
Supplemental Non-cash Financing Activities:		
Transfer of inventory to capital equipment	$ —	$ 838

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 AND NINE MONTHS ENDED JUNE 30, 2013 AND 2012
(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, 2012.

The consolidated results of operations for the three and nine months ended June 30, 2013, 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, its wholly-owned subsidiaries and subsidiaries in which it has a controlling interest. The Company reports noncontrolling interests in consolidated entities as a component of equity separate from the Company's equity. 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:

	June 30, 2013	September 30, 2012
	(dollars in thousands)	
Deferred revenues	$ 4,814	$ 11,200
Deferred costs	513	964
Deferred profit	$ 4,301	$ 10,236

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, light-emitting diodes (LEDs) and micro-electro-mechanical systems (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 50% 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 June 30, 2013, two customers, individually, accounted for 33%, and 11% of accounts receivable.

Restricted Cash – Restricted cash is $5.1 million and $4.6 million as of June 30, 2013 and September 30, 2012, respectively. The balance includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment of $1.6 million and $3.8 million as of June 30, 2013 and September 30, 2012, respectively. Additionally, restricted cash includes cash received from research and development grants related to our ion implant technology to be used for research and development projects of $3.4 million and $0.8 million as of June 30, 2013 and September 30, 2012, respectively.

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. For the majority of these amounts, a liability has been accrued in deferred profit.

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:

	June 30, 2013	September 30, 2012
	(dollars in thousands)	
Purchased parts and raw materials	$ 11,367	$ 19,644
Work-in-process	2,509	2,328
Finished goods	3,657	3,698
	$ 17,533	$ 25,670

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.

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

	June 30, 2013	September 30, 2012
	(dollars in thousands)	
Land, building and leasehold improvements	$ 10,605	$ 10,476
Equipment and machinery	7,453	7,272
Furniture and fixtures	5,524	5,458
	23,582	23,206
Accumulated depreciation and amortization	(12,427)	(10,819)
	$ 11,155	$ 12,387

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:

	Nine Months Ended June 30, 2013	2012
	(dollars in thousands)	
Beginning balance	$ 8,355	$ 13,313
Change in foreign exchange rates	29	(307)
Ending balance	$ 8,384	$ 13,006

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.

The following is a summary of intangibles:

	Useful Life	June 30, 2013	September 30, 2012
		(dollars in thousands)	
Non-compete agreements	4-8 years	$ 1,059	$ 1,057
Customer lists	10 years	838	828
Technology	5-10 years	2,360	2,341
In-process research and development	(1)	1,600	1,600
Other	2-10 years	329	325
		6,186	6,151
Accumulated amortization		(2,582)	(2,055)
		$ 3,604	$ 4,096

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

Long-lived assets - 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.

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:

	Nine Months Ended June 30, 2013	Nine Months Ended June 30, 2012
	(dollars in thousands)	
Beginning balance	$ 2,687	$ 2,265
Warranty expenditures	(1,137)	(1,260)
Warranty expense	216	2,266
Ending balance	$ 1,766	$ 3,271

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.

On June 28, 2013, the Company's Board of Directors approved the acceleration of the vesting of one half of the unvested stock options with an exercise price of $2.95 and all of the remaining unvested stock options with exercise prices of $6.15 and $7.98 per share for approximately 110 employees holding options to purchase approximately 0.4 million shares of common stock. The Company concluded the modification to the stated vesting provisions was substantive after the Company considered the volatility of its share price and the exercise price of the amended options in relation to recent share values. Because the modification was considered substantive, the remaining unearned compensation expense of $0.9 million was recorded as an expense in the third quarter of Fiscal 2013. The weighted-average exercise price of the options that were accelerated was $5.77.

Effective June 30, 2013, current and former executive officers of the Company voluntarily cancelled approximately 0.1 million stock options, vested and unvested, that were issued with exercise prices of $14.79 and $17.12 per share. At the time of the cancellation, all of the options with an exercise price of $14.79 were fully vested. The Company recognized the remaining unearned compensation expense of $0.3 million for the unvested portion of the stock options with an exercise price of $17.12 per share in the third quarter of Fiscal 2013.

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

	Three Months Ended June 30, 2013	Three Months Ended June 30, 2012	Nine Months Ended June 30, 2013	Nine Months Ended June 30, 2012
	(dollars in thousands)		(dollars in thousands)	
Effect on income before income taxes (1)	$ (1,553)	$ (438)	$ (2,313)	$ (1,341)
Effect on income taxes	315	63	469	194
Effect on net income	$ (1,238)	$ (375)	$ (1,844)	$ (1,147)

(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 2022. Options issued by the Company vest over 2 to 4 years.

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

	Nine Months Ended June 30,			
	2013		2012	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of period	891,293	$ 9.37	611,384	$ 10.02
Granted	312,850	2.95	285,400	7.98
Exercised	—	—	(600)	5.33
Forfeited	(132,318)	15.79	(4,078)	9.46
Outstanding at end of period	1,071,825	$ 6.71	892,106	$ 9.37
Exercisable at end of period	873,969	$ 7.07	377,756	$ 9.16
Weighted average fair value of options granted during the period	$ 1.82		$ 4.95	

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

	Nine Months Ended June 30,	
	2013	2012
Risk free interest rate	1%	1%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	70%	70%

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:

	Nine Months Ended June 30,			
	2013		2012	
	Awards	Weighted Average Grant Date Fair Value	Awards	Weighted Average Grant Date Fair Value
Beginning Outstanding	127,975	$ 9.06	120,970	$ 9.42
Awarded	—	—	60,600	7.98
Released	(55,646)	7.65	(47,014)	8.53
Forfeited	(50)	7.98	(2,000)	7.22
Ending Outstanding	72,279	$ 10.15	132,556	$ 9.11

Fair Value of Financial Instruments

In accordance with the requirements of the Fair Value Measurements and Disclosures Topic of the FASB Accounting Standards Codification (ASC), the Company groups its financial assets and liabilities measured at fair value on a recurring basis in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

Level 1 - Valuation is based upon quoted market price for identical instruments traded in active markets.

Level 2 - Valuation is based on quoted market prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.

Level 3 - Valuation is generated from model-based techniques that use significant assumptions not observable in the market. Valuation techniques include use of discounted cash flow models and similar techniques.

In accordance with the requirements of the Fair Value Measurements and Disclosures Topic of the FASB ASC, it is the Company's policy to use observable inputs whenever reasonably practicable in order to minimize the use of unobservable inputs when developing fair value measurements. When available, the Company uses quoted market prices to measure fair value. If market prices are not available, the fair value measurement is based on models that use primarily market based parameters including interest rate yield curves, option volatilities and currency rates. In certain cases, where market rate assumptions are not available, the Company is required to make judgments about assumptions market participants would use to estimate the fair value of a financial instrument. Changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values.

Cash Equivalents- Included in Cash and Cash Equivalents in the Condensed Consolidated Balance Sheet is$19.1 million and $15.4 million as of June 30, 2013 and September 30, 2012, respectively, of money market funds invested in treasury bills, notes and other direct obligations of the U.S. Treasury. The fair value of this cash equivalent is based on Level 1 inputs in the fair value hierarchy.

Receivables, Payables and Accruals—The recorded amounts of these financial instruments, including accounts receivable, accounts payable, and accrued liabilities, approximate their fair value because of the short maturities of these instruments. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy.

Pensions—The Company has retirement plans covering substantially all employees. The principal plans are the multiemployer defined benefit pension plans of the Company's operations in The Netherlands and France and the plan for hourly union employees in Pennsylvania. The multiemployer plans in the United States and France are insignificant. The Company's defined contribution plans cover substantially all of the employees in the United States. The Company matches employee funds on a discretionary basis.

Shipping expense – Shipping expenses of $0.3 million and $0.5 million for the three months ended June 30, 2013 and 2012, respectively, are included in selling, general and administrative expenses. Shipping expenses of $0.6 million and $1.5 million
for the nine months ended June 30, 2013 and 2012, 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 when certain conditions have been met. The table below shows gross research and development expenses and grants earned:

	Three Months Ended		Nine Months Ended	
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012
	(dollars in thousands)		(dollars in thousands)	
Research and development	$ 2,158	$ 3,902	$ 6,801	$ 10,289
Grants earned	(211)	(208)	(1,746)	(543)
Net research and development	$ 1,947	$ 3,694	$ 5,055	$ 9,746

Impact of Recently Issued Accounting Pronouncements

In July 2013, the FASB issued ASU No. 2013-11 "Income Taxes (Topic 740)." An unrecognized tax benefit, or a portion of an unrecognized tax benefit, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, except as follows. To the extent a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date under the tax law of the applicable jurisdiction to settle any additional income taxes that would result from the disallowance of a tax position or the tax law of the applicable jurisdiction does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose, the unrecognized tax benefit should be presented in the financial statements as a liability and should not be combined with deferred tax assets. The assessment of whether a deferred tax asset is available is based on the unrecognized tax benefit and deferred tax asset that exist at the reporting date and should be made presuming disallowance of the tax position at the reporting date. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013.

In March 2013, the FASB issued ASU No. 2013-05 "Foreign Currency Matters (Topic 830)." The objective of the amendments in this Update is to resolve the diversity in practice about which codification subtopic applies to the release of the cumulative translation adjustment into net income when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity.

The amendments in this Update are effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. The Company will evaluate the impact of the Update as future transactions occur.

In February 2013, The FASB issued ASU No. 2013-04 *"Liabilities (Topic 405),"* The guidance in this Update requires an entity to measure obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of this guidance is fixed at the reporting date, as the sum of the following:

a. The amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors.
b. Any additional amount the reporting entity expects to pay on behalf of its co-obligors.

The guidance in this Update also requires an entity to disclose the nature and amount of the obligation as well as other information about those obligations. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company does not expect this Update to have a material impact on the Company's consolidated financial statements.

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, expected future taxable income and available tax planning strategies. The Company maintains a valuation allowance with respect to certain state and foreign deferred tax assets that may not be recovered. Each quarter the valuation allowance is re-evaluated. The valuation allowance during the nine months ended June 30, 2013, increased due to a $4.7 million valuation allowance established on all deferred tax assets in Netherlands and an increase in the valuation allowance on deferred tax assets related to the current period net operating loss in China. The Accounting Standards Codification states that forming a conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years. As a result, we recorded a $4.7 million valuation allowance on the deferred tax assets related to the Netherlands.

The Company classifies uncertain tax positions as non-current income taxes payable unless expected to be paid within one year. At June 30, 2013 and September 30, 2012, the total amount of unrecognized tax benefits was approximately $1.8 million. 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 ofJune 30, 2013, and September 30, 2012, the Company has an accrual for potential interest and penalties of approximately $0.7 million.

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, but generally from 3 to 5 years.

3. Earnings Per Share

Basic earnings per share (EPS) is computed by dividing net income (loss) 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 June 30, 2013, options for 1,100,000 shares and 72,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the three months ended June 30, 2012, options for 892,000 shares and 133,000 restricted stock awards were excluded from the diluted EPS calculations because they were anti-dilutive. For the nine months ended June 30, 2013, options for 1,100,000 shares and 72,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the nine months ended June 30, 2012 options for 892,000 shares and 133,000 restricted stock awards were excluded from the diluted EPS calculations because they were anti-dilutive.

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2013	2012	2013	2012
	(in thousands, except per share amounts)		(in thousands, except per share amounts)	
Basic Loss Per Share Computation				
Net loss attributable to Amtech Systems, Inc.	$ (12,101)	$ (2,965)	$ (18,386)	$ (8,920)
Weighted Average Shares Outstanding:				
Common stock	9,539	9,479	9,524	9,468
Basic loss per share attributable to Amtech shareholders	$ (1.27)	$ (0.31)	$ (1.93)	$ (0.94)
Diluted Loss Per Share Computation				
Net loss attributable to Amtech Systems, Inc.	$ (12,101)	$ (2,965)	$ (18,386)	$ (8,920)
Weighted Average Shares Outstanding:				
Common stock	9,539	9,479	9,524	9,468
Common stock equivalents (1)	—	—	—	—
Diluted shares	9,539	9,479	9,524	9,468
Diluted loss per share attributable to Amtech shareholders	$ (1.27)	$ (0.31)	$ (1.93)	$ (0.94)

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

4. Business Segment Information

The Company's products are classified into two core business segments. The solar and semiconductor equipment segment designs, manufactures and markets semiconductor wafer processing and handling equipment used in the fabrication of integrated circuits, solar cells and MEMS. Also included in the solar and semiconductor equipment segment are the manufacturing support service operations and corporate expenses, except for a small portion that is allocated to the polishing supplies and equipment segment. The polishing supplies and equipment segment designs, manufactures and markets carriers, templates and equipment used in the lapping and polishing of wafer-thin materials, including silicon wafers used in the production of semiconductors.

Information concerning our business segments is as follows:

	Three Months Ended		Nine Months Ended	
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012
	(dollars in thousands)			

Net Revenues:				
Solar and semiconductor equipment	$ 8,426	$ 21,777	$ 21,647	$ 64,336
Polishing supplies and equipment	1,972	2,523	6,226	6,258
	$ 10,398	$ 24,300	$ 27,873	$ 70,594
Operating loss:				
Solar and semiconductor equipment	$ (10,330)	$ (5,696)	$ (18,607)	$ (13,738)
Polishing supplies and equipment	81	446	145	659
	$ (10,249)	$ (5,250)	$ (18,462)	$ (13,079)

	June 30, 2013	September 30, 2012
	(dollars in thousands)	
Identifiable Assets:		
Solar and semiconductor equipment	$ 99,092	$ 123,923
Polishing supplies and equipment	4,363	5,099
	$ 103,455	$ 129,022
Goodwill:		
Solar and semiconductor equipment	$ 7,656	$ 7,627
Polishing supplies and equipment	728	728
	$ 8,384	$ 8,355

5. **Major Customers and Foreign Sales**

During the three months ended June 30, 2013, two customers individually represented 48% and 11% of net revenues. During the three months ended June 30, 2012, four customers individually represented 27%, 14%, 12% and 11% of net revenues. During the nine months ended June 30, 2013, one customer represented 24% of net revenues. During the nine months ended June 30, 2012, two customers individually represented 12% and 11% of net revenues.

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

	Nine Months Ended June 30,	
	2013	2012
United States	**20 %**	**8 %**
China	42 %	50 %
Taiwan	13 %	7 %
Other	9 %	14 %
Total Asia	**64 %**	**71 %**
Total Europe	**16 %**	**21 %**
	100 %	**100 %**

6. Commitments and Contingencies

Purchase Obligations – As of June 30, 2013 we had purchase obligations in the amount of $7.5 million compared to $12.1 million as of September 30, 2012. 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.

Development project – During the quarter ended June 30, 2013, Shanghai Kingstone Semiconductor Company Ltd. ("Kingstone") entered into an agreement with certain government agencies in Shanghai, China for the purpose of developing ion implanters for a non-solar application. As of June 30, 2013, Kingstone has begun the first phase of this development project and received the first $2.6 million of grant funds for the project. Under the arrangement, Kingstone has agreed that by July 2014 it will have in place $6.1 million of its commitment to the project. The agreement will terminate upon the occurrence of certain events or if the project does not pass the first phase project evaluation. Otherwise, the remainder of Kingstone's commitment is to be in place by December 2015. Amtech owns 55% of Kingstone Technology Hong King Limited, which owns 100% of Shanghai Kingstone Semiconductor Company Ltd. Amtech has no obligation or plan to fund Kingstone's commitments under this agreement.

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.

7. Restructuring and Impairment Charges

Restructuring charges for the nine months ended June 30, 2013 were $0.9 million. The restructuring charges in fiscal 2013 relate primarily to severance costs incurred as a result of the reductions-in-force at certain operations. In fiscal 2012, an impairment charge was recorded for assets related to a product development project.

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, 2012.

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, 2012 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
- Recently Issued Accounting Pronouncements

Overview

We are a leading supplier of thermal processing systems, including related automation, parts and services, to the solar/photovoltaic, semiconductor, silicon wafer and MEMS industries and also offer PECVD (plasma-enhanced chemical vapor deposition) equipment. We also manufacture polishing templates, steel carriers and double-sided polishing and lapping machines for fabricators of LED's, optics, quartz, ceramics and metal parts, and for manufacturers of medical equipment components. Since the 2011 acquisition of Kingstone Technology Hong Kong, Limited ("Kingstone") a holding company that owns 100% of Kingstone Semiconductor Company Ltd., a Shanghai-based technology company, we have advanced the development of an ion implanter to provide our solar customers with a more complete solution for their next-generation high-efficiency solar cell production.

Our customers are primarily manufacturers of solar cells and integrated circuits. The solar cell and semiconductor industries are cyclical and historically have experienced significant fluctuations. Our revenue is impacted by these broad industry trends. In 2012, the solar cell industry entered a period of structural imbalance between supply and demand and we expect this structural imbalance to continue into fiscal 2014. This imbalance has negatively impacted our results of operations and is expected to do so in the future.

Our strategy has been, and continues to be, to grow the Company through strategic product development and acquisitions. In addition to internal product development, we have acquired companies with complementary products or products that serve adjacent process steps. In October 2007, we acquired R2D Automation SAS, which allowed us to provide our diffusion furnaces with integrated automation that is also sold as a stand-alone product.

Results of Operations

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

	Three Months Ended		Nine Months Ended	
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012

Net revenue	100 %	100 %	100 %	100 %
Cost of goods sold	83 %	70 %	81 %	72 %
Write-down of inventory	43 %	10 %	15 %	5 %
Gross margin	(26)%	20 %	4 %	23 %
Operating expenses:				
Selling, general and administrative	52 %	27 %	49 %	26 %
Restructuring and impairment charges	2 %	0 %	3 %	1 %
Research and Development	19 %	15 %	18 %	14 %
Total operating expenses	73 %	42 %	70 %	41 %
Loss from operations	(99)%	(22)%	(66)%	(18)%
Interest income (expense), net	1 %	0 %	1 %	0 %
Loss before income taxes	(98)%	(22)%	(65)%	(18)%
Income taxes provision (benefit)	25 %	(5)%	5 %	(2)%
Net loss	(123)%	(17)%	(70)%	(16)%
Add: net loss attributable to noncontrolling interest	5 %	5 %	4 %	3 %
Net loss attributable to Amtech Systems, Inc.	(118)%	(12)%	(66)%	(13)%

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 thermal system sales, revenue and operating income can be significantly impacted by the timing of system shipments, the net impact of revenue deferral on those shipments and recognition of revenue based on customer acceptances.

Net revenue for the quarters ended June 30, 2013 and 2012 was$10.4 million and $24.3 million, respectively, a decrease of $13.9 million or 57%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar and semiconductor industries. Net revenue from the solar market was $6.5 million and $15.2 million for the three months ended June 30, 2013 and 2012, respectively. The current supply / demand imbalance and global economic conditions have negatively impacted sales in the solar equipment market and have caused our customers to significantly slow or push out their capacity expansion plans. It is difficult to predict when the market will improve, but we expect this downturn to continue into fiscal 2014. Lower revenues from the semiconductor industry are primarily a result of the current cyclical downturn affecting the semiconductor equipment market.

Net revenue for the nine months ended June 30, 2013 and 2012 was$27.9 million and $70.6 million, respectively, a decrease of $42.7 million or 61%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar and semiconductor industries, as well as decreased recognition of previously-deferred revenue. Net revenue from the solar market was $14.6 million and $41.4 million for the nine months ended June 30, 2013 and 2012, respectively. The year-to-date results were negatively impacted by the supply / demand imbalance and global economic conditions discussed above.

Backlog and Orders

Our order backlog as of June 30, 2013 and 2012 was $24.8 million and $35.6 million, respectively. Our backlog as of June 30, 2013 includes approximately $19.3 million of orders and deferred revenue from our solar industry customers, compared to $26.1 million at June 30, 2012. New orders booked in the quarter ended June 30, 2013 were $20.7 million compared to $6.1 million in the quarter ended June 30, 2012. As the majority of the backlog is denominated in Euros, the strengthening of the Euro during the third quarter of fiscal 2013 resulted in an increase in backlog of approximately $0.2 million. As of June 30, 2013, one customer accounted for 55% of our order backlog. This order was received in June 2013. Except for this large solar order, our order pipeline has been slow due to the worldwide overcapacity of solar cell production and the slowdown in orders from our customers serving the semiconductor industry. We expect the pipeline to remain slow into fiscal 2014 due to the slow growth in demand for solar modules caused by overcapacity and the likelihood of lower government subsidies for solar energy installations. The recent trade rulings for anti-dumping duties in the U.S. and the uncertainties in Europe have also had a negative impact on our customers in China.

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 (loss) for the three months ended June 30, 2013 and 2012 was$(2.7) million and $4.8 million, respectively; a decrease of $7.5 million. Gross margin was negative 26% in the quarter ended June 30, 2013 compared to positive20% in the quarter ended June 30, 2012. The negative gross margin resulted from inventory write-downs of $4.4 million, lower selling prices for solar furnaces and underutilized manufacturing capacity, partially offset by lower spending resulting from company-wide cost-control initiatives. In the quarter ended June 30, 2013 we had a net recognition of deferred profit of $0.8 million compared to a net recognition of $6.7 million in the quarter ended June 30, 2012. The lower net recognition of deferred profit had a negative impact on gross margins.

Gross profit for the nine months ended June 30, 2013 and 2012 was$1.2 million and $16.1 million, respectively, a decrease of $14.9 million or 93%. Gross margin was 4% in the nine months ended June 30, 2013 compared to 23% in the nine months ended June 30, 2012. Gross margins were negatively impacted by $4.1 million of inventory write-downs, lower sales volumes and the related lower capacity utilization and lower net recognition of previously-deferred profit, partially offset by lower spending resulting from company-wide cost-control initiatives. In the nine months ended June 30, 2013 and 2012, we had a net recognition of deferred profit of $6.1 million and $14.7 million, respectively. The lower net recognition of deferred profit had a negative impact on gross margins.

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 June 30, 2013 and 2012 were $5.4 million and $6.4 million, respectively. SG&A expenses include $1.6 million and $0.4 million of stock-based compensation expense for the quarters ended June 30, 2013 and 2012, respectively. SG&A expenses for the nine months ended June 30, 2013 and 2012 were $13.7 million and $18.7 million, respectively. SG&A expenses include $2.3 million and $1.3 million of stock-based compensation expense for the nine months ended June 30, 2013 and 2012, respectively. Stock-based compensation expense increased due to the acceleration of vesting and the cancellation of certain stock options as of June 30, 2013. The decrease in SG&A expenses was due, in part, to lower commissions and shipping expenses related to lower revenues and also reflects significant company-wide cost-control initiatives to reduce salaries, professional fees, travel and insurance expense.

Impairment and Restructuring Charges

Impairment and restructuring charges for the nine months ended June 30, 2013 and 2012 were $0.9 million and $0.7 million, respectively. The company's cost-cutting efforts in fiscal 2013 included reductions-in-force which resulted in restructuring charges related primarily to severance costs. In fiscal 2012, an impairment charge was recorded for assets related to a product development project.

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				Nine Months Ended			
	June 30, 2013	June 30, 2012	Incr. (Decr.)	% change	June 30, 2013	June 30, 2012	Incr. (Decr.)	% change
	(dollars in thousands)				(dollars in thousands)			
Research and development	$ 2,158	$ 3,902	$ (1,744)	(45)%	$ 6,801	$ 10,289	$ (3,488)	(34)%
Grants earned	(211)	(208)	(3)	1 %	(1,746)	(543)	(1,203)	222 %
Net research and development	$ 1,947	$ 3,694	$ (1,747)	(47)%	$ 5,055	$ 9,746	$ (4,691)	(48)%

Research and development costs (net of grants earned) for the three months ended June 30, 2013 decreased $1.7 million compared to the three months ended June 30, 2012. Research and development costs (net of grants earned) for the nine months ended June 30, 2013 decreased $4.7 million compared to the nine months ended June 30, 2012. Decreased research and development spending relates to reduced activity in solar research and development. We receive reimbursements through governmental research and development grants which are netted against these expenses. The increase in the year-to-date amount of government grants earned resulted primarily from grant funding for development of a solar ion implanter.

As described in Note 6 to the Condensed Consolidated Financial Statements included in this filing, our Kingstone subsidiary has entered into an agreement for the development of ion implanters for a non-solar application in China. Depending on its progress, this development project may result in a significant increase in research and development expenses.

Income Taxes

For the three months and nine months ended June 30, 2013 we recorded income tax expense of $2.6 million and $1.3 million, respectively, primarily due to establishing a $4.7 million valuation allowance on all deferred tax assets related to Netherlands income taxes. The valuation allowance was recorded due to cumulative losses in the Netherlands. For the three months and nine months ended June 30, 2012 we recorded an income tax benefit of $1.1 million and $1.7 million, respectively, for effective tax rates of 21% and 13%, respectively. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). Since the increase in the valuation allowance resulted in income tax expense in fiscal 2013 when there was a pre-tax loss the effective tax rate is not meaningful. The tax benefit for the first nine months of fiscal 2012 included the benefit realized from a favorable resolution of an uncertain tax position. The income tax provisions 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.

The Financial Accounting Standards requires that a valuation allowance be established when it is “more likely than not” that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including a company's performance, the market environment in which the company operates and the length of carryback and carryforward periods. According to those standards, it is difficult to conclude that a valuation allowance is not needed when the negative evidence includes cumulative losses in recent years. Therefore, cumulative losses weigh heavily in the overall assessment. As a result of the review as of June 30, 2013, we concluded that it was appropriate to establish a full valuation allowance for net deferred tax assets in the Netherlands and China, where cumulative losses have been incurred. Available tax planning strategies cause us to believe that it is more likely than not the deferred tax assets related to the United States tax jurisdiction will be realized despite cumulative losses there.

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 Dutch operations from 35% to a marginal rate of 25%, as we intend to permanently reinvest future Dutch earnings in our foreign operations. The effect of the restructure on our tax rate depends on the amount of income or loss earned in the Netherlands, as well as the portion of such income that can be demonstrated to have been derived from qualified new technologies, as well as the factors mentioned above.

Liquidity and Capital Resources

At June 30, 2013 and September 30, 2012, cash and cash equivalents were $38.8 million and $46.7 million, respectively. At June 30, 2013 and September 30, 2011, restricted cash was $5.1 million and $4.6 million, respectively. Restricted cash increased in the first half of fiscal 2013 primarily due to the receipt of research and development grants which are to be passed through to our development partners, as well as the receipt of other grant funds subject to restrictions. Our working capital was $44.4 million as of June 30, 2013 and $60.2 million as of September 30, 2012.

The decrease in cash for the first nine months of fiscal 2013 was due to cash used in operating activities of $8.0 million discussed below. We maintain a portion of our cash and cash equivalents in Euros at our Dutch and French operations, therefore, changes in the exchange rate have an impact on our cash balances. Our ratio of current assets to current liabilities was 2.3:1 and 2.4:1 as of June 30, 2013 and September 30, 2012, respectively.

In July 2013 we paid approximately $8.7 million of Dutch income tax and interest payments. We expect to receive a refund of those taxes of approximately $7.3 million by December 31, 2013, for a net $1.4 million of Dutch tax payments. In fiscal year 2014, we expect to make U.S. income tax payments of approximately $5.7 million. In July 2013 we received approximately $6.8 million in customer deposits that do not require a bank guarantee. See information below regarding other contractual obligations. We have never paid dividends on our Common Stock.

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. Our Kingstone subsidiary will be exploring such sources of capital to raise $6.1 million by July 2014 to meet is first commitment to the project funding describe in Note 6 to the Condensed Consolidated Financial Statement included in Part 1 of this filing. Amtech has no obligation or plan to fund Kingstone's commitments under this agreement. There can be no assurance that we can raise such additional capital resources on satisfactory terms. We believe that our principal sources of liquidity discussed above are sufficient to support operations for at least the next twelve months.

Cash Flows from Operating Activities

Cash used in our operating activities was $8.0 million for the nine months ended June 30, 2013, compared to $17.5 million used by such activities for the nine months ended June 30, 2012. During the nine months ended June 30, 2013, $9.6 million of cash was used as a result of the net loss from operations, adjusted for non-cash charges. Additional cash was used by the payment of accounts payable, income taxes and accrued compensation. Cash was generated by reductions in inventory and from collections of accounts receivable in excess of the reductions in deferred profit and customer deposits.

Cash Flows from Investing Activities

Our investing activities for the nine months ended June 30, 2013 and 2012 consisted of purchases of property, plant and equipment of $0.2 million and $1.2 million, respectively.

Cash Flows from Financing Activities

There were no cash flows from financing activities in the nine months ended June 30, 2013. For the nine months ended June 30, 2012, $4.1 million was used to reacquire shares issued in connection with the Kingstone acquisition.

Off-Balance Sheet Arrangements

As of June 30, 2013, 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 were $7.5 million as of June 30, 2013 compared to $12.1 million as of September 30, 2012, a decrease of $4.6 million. Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2012, for information on the Company's other contractual obligations. Also, see Note 6 to the Condensed Consolidated Financial Statements in Part 1 of this filing.

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 ongoing 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, 2012. 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, 2012 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 nine months ended June 30, 2013.

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 2012 and in the first nine months of fiscal 2013, 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 nine months ended June 30, 2013 and 2012. As of June 30, 2013, our foreign subsidiaries had $1.6 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 June 30, 2013, we had $1.7 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 $0.2 million. The risk associated with foreign currency translation gains and losses has increased with our 2011 acquisition in China.

We incurred foreign currency translation gains of $0.7 million and losses of $5.4 million during the nine months ended June 30, 2013 and 2012, 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 $42.6 million as of June 30, 2013. A 10% change in the value of the foreign currencies relative to the U.S. dollar would cause approximately $4.3 million of other comprehensive income (loss). The risk associated with foreign currency translation adjustments has increased with our 2011 acquisition in China.

During the nine months ended June 30, 2013 and 2012, U.S. dollar denominated sales of our European operations were $1.2 million and $0.9 million, respectively. As of June 30, 2013, sales commitments denominated in a currency other than the functional currency of our transacting operation totaled $0.8 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 June 30, 2013, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled $0.3 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 not cause our cost of such items to be significantly 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 June 30, 2013, 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 nine months ended June 30, 2013 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

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, 2012 (our "2012 Form 10-K"). There have been no material changes to the risk factors previously disclosed on our fiscal 2012 Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

10.15	Second Amendment, dated June 28, 2013, to the Second Amended and Restated Employment Agreement between Amtech Systems, Inc. and Jong S. Whang, dated as of February 9, 2012.	
10.16	Second Amendment, dated June 28, 2013, to the Employment Agreement between Amtech Systems, Inc. and Fokko Pentinga, dated as of June 29, 2012.	
10.17	Amendment, dated June 28, 2013, to the Change of Control Severance Agreement between Amtech Systems, Inc. and Bradley C. Anderson, dated as of March 10, 2008.	
10.18	Employment Agreement and Release between Amtech Systems, Inc. and Robert T. Hass, dated as of June 28, 2013.	
10.19	Employment Agreement and Release between Amtech Systems, Inc. and Jeong Mo Hwang PhD, dated as of June 28, 2013.	
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.

** Furnished 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 not deemed to be filed or otherwise incorporated by reference into any 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/ Bradley C. Anderson Dated: August 8, 2013

Bradley C. Anderson
Executive Vice President - Finance/Chief Financial Officer
(Principal Accounting Officer)

SECOND AMENDMENT TO EMPLOYMENT AGREEMENT

Whereas, Amtech Systems, Inc. ("Company) and Jong S. Whang ("Executive") entered into an Employment Agreement (the "Agreement") dated February 9, 2012; and

Whereas, the Company and Executive entered into an Amendment to Employment Agreement dated July 1, 2012; and

Whereas, Company and Executive now desire to further modify the Agreement pursuant to Paragraph 20 thereof, and to enter into this Second Amendment to Employment Agreement ("Second Amendment");

The parties hereto therefore agree to the following modification to the Agreement, to be effective as of the date set forth below; with all unmodified portions of the Agreement to remain in full force and effect as written:

1. Section 2 of the Agreement is hereby amended to reduce the annual base compensation from $320,000 per annum to $224,000

2. Section 18(a)(i) of the Agreement is hereby amended to add to the end of that subsection the following parenthetical clause: “(which for purposes of this Section 18(a)(i) only shall be not less than $400,000 per annum)”.

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment as of the 28th day of June, 2013.

AMTECH SYSTEMS, INC.

By: /s/ Bradley C. Anderson
Bradley C. Anderson,

Its: Executive Vice President and Chief Financial Officer

By: /s/ Jong S. Whang
Jong S. Whang, Executive

SECOND AMENDMENT TO EMPLOYMENT AGREEMENT

Whereas, Amtech Systems, Inc. ("Company) and Fokko Pentinga ("Executive") entered into an Employment Agreement (the "Agreement") dated June 29, 2012; and

Whereas, the Company and Executive entered into an Amendment to Employment Agreement dated July 1, 2012; and

Whereas, Company and Executive now desire to further modify the Agreement pursuant to Paragraph 20 thereof, and to enter into this Second Amendment to Employment Agreement ("Second Amendment");

The parties hereto therefore agree to the following modification to the Agreement, to be effective as of the date set forth below; with all unmodified portions of the Agreement to remain in full force and effect as written:

1. Section 2 of the Agreement is hereby amended to reduce the annual base compensation from US$314,500, or €241,664, per annum to US$251,600, or €193,241.

2. Section 19(b)(i) of the Agreement is hereby amended to add the following parenthetical clause after the words "Termination Date" in the second line of that subsection: "(which for purposes of this Section 19(b)(i) only shall be not less than $370,000, or €284,310, per annum)".

3.

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment as of the 28th day of June, 2013.

AMTECH SYSTEMS, INC.

By: /s/ Bradley C. Anderson
Bradley C. Anderson,

Its: Executive Vice President and Chief Financial Officer

By: /s/ Fokko Pentinga
Fokko Pentinga, Executive

AMENDMENT TO CHANGE OF CONTROL SEVERANCE AGREEMENT

Whereas, Amtech Systems, Inc. ("Company) and Bradley C. Anderson ("Executive") entered into a Change of Control Severance Agreement (the "Agreement") dated March 10, 2008; and

Whereas, Company and Executive now desire to modify the Agreement pursuant to Paragraph 5 thereof, and to enter into this Amendment to Change of Control Severance Agreement ("Amendment");

The parties hereto therefore agree to the following modification to the Agreement, to be effective as of the date set forth below; with all unmodified portions of the Agreement to remain in full force and effect as written:

1. Section 2(a)(i) of the Agreement is hereby amended to add to the end of that subsection the following parenthetical clause: "(which for purposes of this Section 2(a)(i) only shall be not less than $265,000 per annum)".
2.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the 28th day of June, 2013.

AMTECH SYSTEMS, INC.

By: /s/ Jong S. Whang
Jong S. Whang

Its: Chairman

By: /s/ Bradley C. Anderson
Bradley C. Anderson, Executive

EMPLOYMENT AGREEMENT AND RELEASE

This Employment Agreement and Release ("Agreement") is made and entered into as of this 1st day of July, 2013 (the "Effective Date") by and between Amtech Systems, Inc., a Delaware corporation ("Amtech"), and Robert Hass ("Employee").

RECITALS

WHEREAS, Amtech currently employs Employee as its Chief Accounting Officer ("CAO"), and as an at-will employee, at Amtech's Tempe, Arizona location;

WHEREAS, Amtech is restructuring certain of its management positions and eliminating the CAO position, but desires to continue to employ Employee in the position of Vice President for a period of two (2) years after the Effective Date on the terms set forth in this Agreement, and Employee desires to be employed by Amtech in that capacity, on such terms, and for such period; and

WHEREAS, Amtech and Employee desire to enter into this Agreement setting forth the terms, conditions, and obligations of the parties with respect to such employment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants set forth in this Agreement, and intending to be legally bound hereby, the parties hereto agree as follows:

1. Employment and Term. Amtech shall continue to employ Employee, and Employee hereby accepts continued employment with Amtech, upon the terms and conditions set forth in this Agreement. The term of this Agreement shall be two (2) years from the Effective Date. The parties agree that this Agreement, and Employee's employment with Amtech, will terminate on the Termination Date, which is two (2) years after the Effective Date.

2. Position and Duties. Amtech shall employ Employee as Vice President, to perform such reasonable duties and responsibilities as the Chief Financial Officer ("CFO") of Amtech may from time to time prescribe, which duties and responsibilities shall, in the sole discretion of Amtech, require no more than twenty-four (24) hours per week of Employee's full-time effort. During the remaining portion of the week, Employee shall be free to pursue and engage in other employment or self-employment so long as it complies with this Agreement and does not any way materially interfere with the performance of his duties under this Agreement.

3. Compensation and Benefits. Employee shall be entitled to receive the following as full and complete compensation for the services rendered by Employee to Amtech under this Agreement.

(a) Salary. Employee shall receive a salary of eighty-five thousand dollars and no cents ($85,000.00) per year during the term of this Agreement, which shall be paid to Employee in accordance with Amtech's regular payroll practices for so long as Employee continues to be employed by Amtech during the term of this Agreement, and from which Amtech shall make all required deductions and/or withholdings, including for federal and state taxes, and any other deductions authorized by Employee or the law. Employee will not be entitled to a bonus during the term of this Agreement.

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

(c) Benefits. During Employee's employment hereunder, and subject to the provisions of this Agreement, Employee and Employee's dependents, to the extent they are eligible, shall be entitled to participate in all medical, dental, vision, 401k, paid time off (PTO), and other employee benefit plans, if any, and in Amtech's vacation and business expense reimbursement policies or programs, made available by Amtech to similarly situated employees, all in accordance with Amtech's policies concerning such plans, except that Employee shall earn vacation and sick days off at the rate of 60% of full time employees. Employee acknowledges and agrees that any questions concerning eligibility, coverage, or duration shall be governed by the terms of the plans or policies. Employee further acknowledges and agrees that Amtech has and reserves the right to modify, suspend, or discontinue any benefit plans, policies, and practices at any time without notice to or recourse by Employee, so long as such action is taken generally with respect to substantially all employees employed by Amtech at its corporate headquarters. Employee will not be entitled to a car allowance during the term of this agreement.

(d) Termination of Employment. Subject to this subparagraph 3(c), Employee's employment with Amtech will terminate on the Termination Date. However, Employee may terminate his employment and this Agreement at any time, with or without cause or notice, in which case all of Amtech's obligations under this Agreement will cease as of the date that Employee terminates his employment. However, if Employee signs and does not revoke a Release in the form of Exhibit A attached hereto upon his said employment of employment with Amtech, Amtech shall pay Employee fifty per cent (50%) of the salary set forth in this Agreement for the remaining portion of the term of this Agreement, and shall accelerate vesting of all outstanding stock options held by Employee. In the event that Amtech terminates Employee's employment with Cause before the Termination Date, all of Amtech's obligations under this Agreement will cease as of the date that such employment is terminated. In the event that, prior to the Termination Date, either Employee resigns for Good Reason or Amtech terminates Employee's employment without cause, Amtech's obligations under this Agreement will remain in effect through the Termination Date, including the accelerating vesting of all outstanding stock options held by Employee. Amtech's obligations under this Agreement shall also cease upon the death or the permanent and total disability of Employee. “Cause” as used herein means (i) Employee's indictment for, conviction of or plea of no contest with respect to any felony violation or crime of moral turpitude or dishonesty; (ii) commission by Employee of an intentional and deliberate material fraud, or an intentional and deliberate material misappropriation of funds or property of or upon Amtech; or (iii) the willful and continued failure of Employee to perform substantially Employee's duties to Amtech in accordance with this Agreement after a written demand for substantial performance and the failure to comply within fifteen (15) calendar days after Employee's receipt of such demand. “Good Reason” as used herein shall have the same meaning as “constructive discharge” under Arizona Revised Statutes 23-1502(A), or shall mean a material breach by Amtech of this Agreement.

(e) In the event that Employee is still employed by Amtech at the end of the term, and Employee agrees to sign at that time, and does not revoke, a Release in the form of Exhibit A attached hereto, then Amtech agrees to pay Employee the sum of ten thousand dollars and no cents ($10,000.00), less applicable deductions, in exchange for such Release.

4. Restrictive Covenants. Employee agrees that Amtech's products, services, and designs are unique, and that Amtech has a legitimate business interest in protecting its relationship with its customers and suppliers, its Confidential Information (as defined below), its goodwill, and its investment in its employees, including Employee himself. Amtech therefore is unwilling to enter into and perform this Agreement unless

Employee enters into the agreements contained in this Paragraph and its subsections. To induce Amtech to enter into this Agreement, Employee agrees as follows:

(a) Non-Competition. Subject to the provisions in Paragraph 4(a)(i) below, in recognition and acknowledgment of the highly competitive and world-wide nature of Amtech's business activities, during Employee's employment with Amtech and for the duration of the Restricted Period thereafter, Employee will not, directly or indirectly, compete with Amtech by working for, as an employee, advisor, consultant, independent contractor, or in any other capacity, any business, group, entity, person, governmental unit, or other party that engages in the Business Activities of Amtech in the Restricted Territory. For purposes of this Agreement, (i) the term "Restricted Period" means the twelve (12) month period immediately following the date Employee's employment with Amtech terminates for any reason, (ii) the term "Business Activities" means solar and semiconductor production and automation systems and related supplies for the manufacture of solar cells, semiconductors and silicon wafers; and (iii) the term "Restricted Territory" means the continents of North America, Europe and Asia. Employee further agrees during his employment with Amtech and during the Restricted Period not to develop or assist others in developing products or services with the same or similar functionality to the products or services developed or under development by Amtech prior to and during Employee's employment with Amtech. Employee further acknowledges and agrees to the reasonableness of this covenant not to compete and the reasonableness of the geographic area and duration of time which are a part of said covenant. Employee also acknowledges and agrees that this covenant will not preclude Employee from becoming gainfully employed following termination of his employment with Amtech.

(i) Notwithstanding anything in this Agreement to the contrary, in recognition of Employee's need to provide certain services to outside companies during and after his employment with Amtech in order to be and remain employed, Amtech agrees that it shall not be a violation of Paragraph 4(a) of this Agreement if Employee provides services to other companies during Employee's employment with Amtech, provided that Employee provides any such services only during those times when he is not scheduled to work for Amtech (*i.e.*, on vacation or other non-working time), and that such other companies are not competitors of Amtech.

(b) Non-Solicitation.

(i) Customers. Employee agrees that during Employee's employment with Amtech and the Restricted Period, Employee shall not, either for Employee or for any other person, business, or entity, for any reason, either directly or indirectly, call on or attempt to call on, contact or attempt to contact, solicit or attempt to solicit, assist in the solicitation of or attempt to assist in the solicitation of, take away or attempt to take away, divert away or attempt to divert away, any Customer of Amtech, including but not limited to any Customer who became a Customer of Amtech through Employee's efforts or contacts, for the purpose of providing similar products or services as provided by Amtech. For the purpose of this Paragraph 4(b)(i), "Customer" means any person, company, business, governmental unit, or other entity that is or was an actual, targeted or prospective Customer of Amtech during the last twenty-four (24) months of Employee's employment with Amtech.

(ii) Employees of Amtech. Employee agrees that during Employee's employment and the Restricted Period, Employee shall not solicit, encourage, influence, induce, or cause others to solicit, encourage, influence, or induce any Amtech employee to terminate his or her employment relationship with Amtech, or solicit, induce, seek to hire, and/or offer employment to any Amtech employee, either as an employee, consultant, advisor, or independent contractor

(c) Non-Disclosure of Confidential Information. Employee acknowledges that (i) Amtech's Business is “relationship based”: (ii) through great effort and expense, Amtech has developed and maintained invaluable business relationships (contractual and prospective) with Amtech's Customers, as well as service and product providers and vendors, and individuals who are employed by or represent the foregoing (collectively, “Business Relationships”); and (iii) in the course of his employment with Amtech, Employee has become and will continue to become aware of and familiar with proprietary, secret, and Confidential Information relating to Amtech and its Business. This “Confidential Information” includes, but is not limited to, proprietary software systems, information concerning internal Business Activities, financial results of operations, contractual and prospective Business Relationships, financial data and records, marketing procedures, Customer lists, information, and requirements, vendor lists, information, and requirements, compilations of information, programming strategies and techniques, methods of doing Business, design systems, business and marketing plans, and other documents and information that is used in the operation, technology, and Business of Amtech. Employee covenants and agrees that all of the foregoing information is required to be maintained in confidence for the continued success of Amtech, all of which proprietary, secret or confidential information constitutes “trade secrets” as that phrase is defined and applied under any applicable federal or state statute or the common law. Employee further covenants and agrees that Amtech's trade secrets will not be misappropriated by Employee at any time, before or after Employee's employment with Amtech, and will remain the sole and exclusive property of Amtech after the termination of his employment, and that he will not, without the prior written consent of Amtech, while employed, or at any time after termination of employment, directly or indirectly, (v) misappropriate or otherwise make any use of such trade secrets or Confidential Information except as may be required in the course of his employment hereunder; or (w) release or otherwise divulge such trade secrets or any other proprietary, secret, or Confidential Information of Amtech to any third party, except as is reasonably necessary in furtherance of his employment duties hereunder.

(d) Notification to Subsequent Employer. If, following termination of Employee's employment with Amtech, Employee accepts other employment or enters into a business relationship with any entity which competes with Amtech by engaging in the Business Activities of Amtech, Employee expressly authorizes and consents to Amtech's informing such competing business of the terms of Paragraph 4 of this Agreement by written notice.

(e) Reasonableness and Remedies. Employee agrees that the length of time and geographic restrictions, and the other covenants and restrictions, in this Paragraph 4 are necessary and reasonable to protect Amtech's protectable interests, including but not limited to its Confidential Information, goodwill, and relationships with its customers, vendors, and referral sources, which Employee agrees are sufficient for protection under Arizona law, that any violation thereof would result in substantial and irreparable injury to Amtech, and that Amtech may not have an adequate remedy at law with respect to any such violation. Accordingly, Employee agrees that, in the event of any actual or threatened violation thereof, Amtech shall have the right to obtain, in addition to any other remedies that may be available, judicial equitable relief, including temporary and permanent injunctive relief, to cease or prevent any actual or threatened violation of any provision hereof.

(f) Blue Pencil Provision. Employee agrees that he has carefully read and considered the covenants and restrictions set forth in this Paragraph 4, and acknowledges they are fair and reasonable and are reasonably required to protect the legitimate business interests of Amtech and do not prevent him from earning a livelihood. Employee agrees that, if the scope of enforceability of any or all of the restrictive covenants set forth in this Agreement is in any way disputed at any time, a court or arbitrator may modify and enforce the covenant(s) to the extent it believes to be reasonable under the circumstances existing at that time. In particular, if the Restricted Period is unreasonably long, then it shall be reduced to six (6) months. If the Restricted Territory is unreasonably broad, it shall be reduced to North America.

(g) Tolling. If Employee violates the obligations contained in this Paragraph 4, the time period herein shall be extended by a period of time equal to that period beginning when the activities constituting such violation commenced and ending when the activities constituting such violation terminated.

(h) Amtech and Subsidiaries. For purposes of Paragraph 4 of this Agreement, "Amtech" shall include its subsidiaries as well as the company.

5. Release. In consideration of Amtech's covenants and agreements herein, Employee hereby unconditionally, irrevocably and absolutely releases and discharges Amtech and, as applicable, all of the present and former employees, officers, directors, partners, members, managers, agents, advisors, consultants, attorneys, insurers, owners, direct or indirect parent or subsidiary entities and their predecessors and/or affiliates, successors and/or assigns (collectively, the "Released Parties"), of and from all manner of claim, suit, lien, damage or demand of whatsoever kind, nature or description, whether known or unknown, suspected or unsuspected, which Employee ever had or now has against the Released Parties, which arose prior and up to the date this Agreement is signed by Employee, and arising out of any manner or thing or in any way connected with, directly or indirectly, the acts or omissions of Amtech, including but not limited to Employee's employment with Amtech and this Agreement, and all losses, liabilities, claims, charges, demands and causes of action arising directly or indirectly out of or in any way connected with the facts or circumstances of Employee's employment by Amtech. This general release is intended to have the broadest possible application and includes, but is not limited to, any and all tort, contract, common law, constitutional and statutory claims, including without limitation any claims or alleged violations of Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Americans with Disabilities Act, the Employee Retirement Income Security Act, the Equal Pay Act, the Fair Labor Standards Act, the Family and Medical Leave Act, the Age Discrimination in Employment Act (all as amended), comparable or similar Arizona employment protection or anti-discrimination statutes, and any and all statutory or common law provisions relating to or affecting Employee's employment by Amtech, or the termination thereof, and all claims for attorneys' fees, costs and expenses. Employee expressly waives his right to recovery of any type, including damages or reinstatement, in any administrative or court claim, whether local, state, or federal, and whether brought by him or on his behalf, related in any way to the matters released herein. However, this release is not intended to and does not bar any claims that, by statute, may not be waived by law, such as claims for workers' compensation benefits, unemployment insurance benefits, or statutory indemnity. Employee is not prohibited from filing a charge with any government agency, including the U.S. Equal Employment Opportunity Commission ("EEOC") or similar state or local administrative agency, or participating in any governmental investigation, so long as Employee does not seek reinstatement or monetary damages, remedies or relief as to any claim released or any right which is hereby waived. Employee does forever waive the right to recover any damages should any local, state or federal agency pursue a claim on Employee's behalf against the Released Parties relating to Employee's employment with Amtech. Employee acknowledges that Amtech has paid him all wages and other compensation currently due to him.

6. Review and Revocation.

(a) Review. A copy of this Agreement was delivered to Employee on June 10, 2013. Employee is advised that Employee has forty-five (45) days from the date this Agreement was delivered to Employee to consider this Agreement. If Employee executes this Agreement before the expiration of forty-five (45) days, Employee acknowledges that Employee has done so for the purpose of expediting the payment of the consideration provided for herein, and that Employee has expressly waived Employee's right to take forty-five (45) days to consider this Agreement.

(b) Revocation. Employee may revoke this Agreement for a period of seven (7) days after Employee signs it. Employee agrees that if Employee elects to revoke this Agreement, Employee will notify Company, in writing (care of Bradley C. Anderson, 131 South Clark Drive, Tempe, Arizona 85281), on or before the expiration of the revocation period. Receipt of proper and timely notice of revocation by Amtech as provided herein cancels and voids this Agreement. Provided that Employee does not provide notice of revocation, this Agreement will become effective upon expiration of the revocation period, as of the Effective Date.

(c) Knowing and Voluntary; ADEA Waiver. Employee represents and warrants that Employee was advised by Amtech to consult with an attorney of Employee's own choosing concerning the provisions set forth herein, and that Employee has thoroughly discussed all aspects of this Agreement with counsel of Employee's choosing, or that Employee has had the opportunity to do so. Employee further represents and warrants that Employee has carefully read and fully understands all of the provisions of this Agreement, including the fact that Employee is releasing all claims and potential claims against Amtech and the other Released Parties, and that Employee is entering into this Agreement without coercion, and with full knowledge of its significance and the legal consequences thereof. Employee represents and warrants that as part of this Agreement, Employee is knowingly and voluntarily releasing and waiving any claims Employee believes Employee may have under the Age Discrimination in Employment Act as of the Effective Date.

(d) The waiver and release herein do not waive any claims that may arise after the Effective Date of this Agreement. This Agreement will only become effective if signed within forty-five (45) days after presentment and not revoked within seven (7) days thereafter. Employee agrees that he enters into this Agreement voluntarily and under no coercion or duress. Amtech's obligations hereunder are expressly conditioned upon Employee's signing and not revoking this Agreement.

(e) Employee acknowledges and agrees that the waiver and release herein is given only in exchange for consideration in addition to anything of value to which Employee is already entitled.

(f) Employee acknowledges and agrees that he has been provided with information, set forth in Exhibit B hereto, regarding persons to whom an employment termination arrangement is being offered and those to whom it is not being offered.

7. Miscellaneous.

(a) Notices. All notices required or permitted to be given hereunder shall be in writing and shall be deemed given when delivered in person, by facsimile transmission, or overnight courier service, or three (3) business days after being deposited in the United States mail, postage prepaid, registered or certified mail, addressed as follows:

If to Amtech:
Bradley C. Anderson
Chief Financial Officer
Amtech Systems, Inc.
131 South Clark Drive
Tempe, Arizona 85281
with a copy to (which shall not constitute notice):
Donald A. Wall
Squire Sanders (US) LLP

1 East Washington Street, Suite 2700
Phoenix, Arizona 85004

If to Employee:

Robert Hass

____

____

Either party may alter the address to which notices or communications are to be sent by giving notice of such change of address in conformity with the provisions of this Section 7(a) for the giving of notice.

(b) Waiver. Neither any failure nor any delay on the part of either party hereto to exercise any right, remedy, power, or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power, or privilege preclude any other or further exercise of the same or of any other right, remedy, power, or privilege, nor shall any waiver of any right, remedy, power, or privilege with respect to any occurrence be construed as a waiver of such right, remedy, power, or privilege with respect to any other occurrence.

(c) Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Arizona without regard to the conflicts of laws principles of such state. The parties agree that any claim, action, complaint, lawsuit, or other dispute arising between the parties related to the terms of this Agreement shall be brought and heard in the federal or state courts located in Maricopa County, Arizona. Amtech and Employee expressly consent to the exercise of personal jurisdiction over it and him by such courts.

(d) Binding Nature of Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, assigns, attorneys, agents, officers, subsidiaries, and affiliates, except that Employee may not assign or transfer his rights or obligations under this Agreement without the prior written consent of Amtech.

(e) Provisions Severable. The provisions of this Agreement are independent of and severable from each other, and no provision shall be affected or rendered invalid or unenforceable by virtue of the fact that for any reason any other or others of them may be invalid or unenforceable in whole or in part.

(f) Entire Agreement. This Agreement contains the entire understanding between the parties hereto with respect to the employment of Employee by Amtech and the other subject matter of this Agreement, and supersedes all prior and contemporaneous agreements and understandings, inducements, and conditions, express or implied, oral or written, with respect to said employment and other subject matter, except for the Amended and Restated Change in Control and Severance Agreement entered into on March 11, 2010. The express terms hereof control and supersede any course of performance and/or usage of the trade inconsistent with any of the terms hereof. This Agreement may not be modified or amended other than by an agreement in writing signed by both parties.

(g) Section Headings. The section headings in this Agreement are for convenience only; they form no part of this Agreement and shall not affect its interpretation.

(h) Construction. The parties hereto acknowledge and agree that each party has participated in the drafting of this Agreement and has had the opportunity to have this document reviewed by the respective legal counsel for the parties hereto and that a rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be applied to the interpretation of this Agreement. No inference in favor of, or against, any party shall be drawn from the fact that one party has drafted any portion hereof.

(i) Consultation with Attorney. Employee acknowledges that he was advised by Amtech to consult with an attorney of his choosing prior to executing this Agreement, and he has had the opportunity to do so.

(j) Execution in Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, and all of which shall together constitute one and the same instrument. This Agreement shall become binding when one or more counterparts hereof, individually or taken together, shall bear the signatures of the parties reflected hereon as the signatories.

(k) Successors and Assigns. This Agreement shall be binding on the parties' successors, heirs, and assigns.

(l) Attorneys' Fees and Costs. Except as otherwise provided herein, in the event of any claim, controversy or dispute arising out of or relating to this Agreement, or the breach hereof, the prevailing party shall be entitled to recover its reasonable attorneys' fees and costs in connection with any court proceeding.

(m) Survival. The provisions in this Agreement that contemplate obligations on Employee's part after his employment with Amtech ends, for whatever reason, shall survive the cessation of his employment and the termination of this Agreement.

(n) Dispute Resolution. Any dispute arising out of or related to the interpretation, meaning or enforcement of this Agreement shall be decided by a single arbitrator in an arbitration, under the auspices of the American Arbitration Association, located in Phoenix, Arizona, subject, however, to the right of Amtech to seek and obtain injunctive or other expedited relief in courts located in Maricopa County, Arizona.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the Effective Date above written.

Amtech Systems, Inc.

By: _/s/Bradley C. Anderson____________________________
Name: Bradley C. Anderson____________________________
Its:____

_/s/Robert T. Hass____
Robert Hass

EMPLOYMENT AGREEMENT AND RELEASE

This Employment Agreement and Release (“Agreement”) is made and entered into as of this 1st day of July, 2013 (the “Effective Date”) by and between Amtech Systems, Inc., a Delaware corporation (“Amtech”), and Jeong-Mo (James) Hwang ("Employee").

RECITALS

WHEREAS, Amtech currently employs Employee as its Chief Technology Officer (“CTO”), and as an at-will employee, at Amtech's Tempe, Arizona location;

WHEREAS, Amtech is restructuring certain of its management positions and eliminating the CTO position, but desires to continue to employ Employee in the position of Vice President - Technology for a period of one (1) year after the Effective Date on the terms set forth in this Agreement, and Employee desires to be employed by Amtech in that capacity, on such terms, and for such period; and

WHEREAS, Amtech and Employee desire to enter into this Agreement setting forth the terms, conditions, and obligations of the parties with respect to such employment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants set forth in this Agreement, and intending to be legally bound hereby, the parties hereto agree as follows:

1. <u>Employment and Term</u>. Amtech shall continue to employ Employee, and Employee hereby accepts continued employment with Amtech, upon the terms and conditions set forth in this Agreement. The term of this Agreement shall be one (1) year from the Effective Date. The parties agree that this Agreement, and Employee's employment with Amtech, will terminate on the Termination Date, which is one (1) year after the Effective Date.

2. <u>Position and Duties</u>. Amtech shall employ Employee as Vice President - Technology, to perform such reasonable duties and responsibilities as the Chief Executive Officer (“CEO”) of Amtech may from time to time prescribe, which duties and responsibilities shall, in the sole discretion of Amtech, require no more than twenty-four (24) hours per week of Employee's full-time effort. During the remaining portion of the week, Employee shall be free to pursue and engage in other employment or self-employment so long as it complies with this Agreement. During the term of this Agreement, Employee shall not, without Amtech's prior written consent, render to others services of any kind, whether or not for compensation, or engage in any other business activity, that would in any way materially interfere with the performance of his duties under this Agreement.

3. <u>Compensation and Benefits</u>. Employee shall be entitled to receive the following as full and complete compensation for the services rendered by Employee to Amtech under this Agreement.

(a) Salary. Employee shall receive a salary of eighty-five thousand dollars and no cents ($85,000.00) per year during the term of this Agreement, which shall be paid to Employee in accordance with Amtech's regular payroll practices for so long as Employee continues to be employed by Amtech during the term of this Agreement, and from which Amtech shall make all required deductions and/or withholdings, including for federal and state taxes, and any other deductions authorized by Employee or the law. Employee will not be entitled to a bonus during the term of this Agreement.

(b) Benefits. During Employee's employment hereunder, and subject to the provisions of this Agreement, Employee and Employee's dependents, to the extent they are eligible, shall be entitled to participate in all medical, dental, vision, 401k, paid time off (PTO), and other employee benefit plans, if any, and in Amtech's vacation and business expense reimbursement policies or programs, made available by Amtech to similarly situated employees, all in accordance with Amtech's policies concerning such plans, except that Employee shall earn vacation and sick days off at the rate of 60% of full time employees. Employee acknowledges and agrees that any questions concerning eligibility, coverage, or duration shall be governed by the terms of the plans or policies. Employee further acknowledges and agrees that Amtech has and reserves the right to modify, suspend, or discontinue any benefit plans, policies, and practices at any time without notice to or recourse by Employee, so long as such action is taken generally with respect to other similarly situated employees employed by Amtech. Employee will not be entitled to a car allowance during the term of this agreement.

(c) Termination of Employment. Subject to this subparagraph 3(c), Employee's employment with Amtech will terminate on the Termination Date. However, Employee may terminate his employment and this Agreement at any time, with or without cause or notice, in which case all of Amtech's obligations under this Agreement will cease as of the date that Employee terminates his employment. However, if Employee signs and does not revoke a Release in the form of Exhibit A attached hereto upon his said employment of employment with Amtech, Amtech shall pay Employee fifty per cent (50%) of the salary set forth in this Agreement for the remaining portion of the term of this Agreement. In the event that Amtech terminates Employee's employment with Cause before the Termination Date, all of Amtech's obligations under this Agreement will cease as of the date that such employment is terminated. In the event that, prior to the Termination Date, either Employee resigns for Good Reason or Amtech terminates Employee's employment without cause, Amtech's obligations under this Agreement will remain in effect through the Termination Date. Amtech's obligations under this Agreement shall also cease upon the death or the permanent and total disability of Employee. “Cause” as used herein means (i) Employee's indictment for, conviction of or plea of no contest with respect to any felony violation or crime of moral turpitude or dishonesty; (ii) commission by Employee of an intentional and deliberate material fraud, or an intentional and deliberate material misappropriation of funds or property of or upon Amtech; or (iii) the willful and continued failure of Employee to perform substantially Employee's duties to Amtech in accordance with this Agreement after a written demand for substantial performance and the failure to comply within fifteen (15) calendar days after Employee's receipt of such demand. “Good Reason” as used herein shall have the same meaning as “constructive discharge” under Arizona Revised Statutes 23-1502(A).

(d) In the event that Employee is still employed by Amtech at the end of the term, and Employee agrees to sign at that time, and does not revoke, a Release in the form of Exhibit A attached hereto, then Amtech agrees to pay Employee the sum of five thousand dollars and no cents ($5,000.00), less applicable deductions, in exchange for such Release.

4. Restrictive Covenants. Employee agrees that Amtech's products, services, and designs are unique, and that Amtech has a legitimate business interest in protecting its relationship with its customers and suppliers, its Confidential Information (as defined below), its goodwill, and its investment in its employees, including Employee himself. Amtech therefore is unwilling to enter into and perform this Agreement unless

Employee enters into the agreements contained in this Paragraph and its subsections. To induce Amtech to enter into this Agreement, Employee agrees as follows:

(a) Non-Competition. Subject to the provisions in Paragraph 4(a)(i) below, in recognition and acknowledgment of the highly competitive and world-wide nature of Amtech's business activities, during Employee's employment with Amtech and for the duration of the Restricted Period thereafter, Employee will not, directly or indirectly, compete with Amtech by working for, as an employee, advisor, consultant, independent contractor, or in any other capacity, any business, group, entity, person, governmental unit, or other party that engages in the Business Activities of Amtech in the Restricted Territory. For purposes of this Agreement, (i) the term “Restricted Period” means the twelve (12) month period immediately following the date Employee's employment with Amtech terminates for any reason, (ii) the term “Business Activities” means solar and semiconductor production and automation systems and related supplies for the manufacture of solar cells, semiconductors and silicon wafers; and (iii) the term “Restricted Territory” means the continents of North America, Europe and Asia. Employee further agrees during his employment with Amtech and during the Restricted Period not to develop or assist others in developing products or services with the same or similar functionality to the products or services developed or under development by Amtech prior to and during Employee's employment with Amtech. Employee further acknowledges and agrees to the reasonableness of this covenant not to compete and the reasonableness of the geographic area and duration of time which are a part of said covenant. Employee also acknowledges and agrees that this covenant will not preclude Employee from becoming gainfully employed following termination of his employment with Amtech.

(i) Notwithstanding anything in this Agreement to the contrary, in recognition of Employee's need to provide certain services to outside companies during and after his employment with Amtech in order to be and remain employed, Amtech agrees that it shall not be a violation of Paragraph 4(a) of this Agreement if Employee provides services to other companies during Employee's employment with Amtech, provided that Employee provides any such services only during those times when he is not scheduled to work for Amtech (*i.e*., on vacation or other non-working time), and that such other companies are not competitors of Amtech.

(b) Non-Solicitation.

(i) Customers. Employee agrees that during Employee's employment with Amtech and the Restricted Period, Employee shall not, either for Employee or for any other person, business, or entity, for any reason, either directly or indirectly, call on or attempt to call on, contact or attempt to contact, solicit or attempt to solicit, assist in the solicitation of or attempt to assist in the solicitation of, take away or attempt to take away, divert away or attempt to divert away, any Customer of Amtech, including but not limited to any Customer who became a Customer of Amtech through Employee's efforts or contacts, for the purpose of providing similar products or services as provided by Amtech. For the purpose of this Paragraph 4(b)(i), “Customer” means any person, company, business, governmental unit, or other entity that is or was an actual, targeted or prospective Customer of Amtech during the last twenty-four (24) months of Employee's employment with Amtech.

(ii) Employees of Amtech. Employee agrees that during Employee's employment and the Restricted Period, Employee shall not solicit, encourage, influence, induce, or cause others to solicit, encourage, influence, or induce any Amtech employee to terminate his or her employment relationship with Amtech, or solicit, induce, seek to hire, and/or offer employment to any Amtech employee, either as an employee, consultant, advisor, or independent contractor

(c) Non-Disclosure of Confidential Information. Employee acknowledges that (i) Amtech's Business is "relationship based": (ii) through great effort and expense, Amtech has developed and maintained invaluable business relationships (contractual and prospective) with Amtech's Customers, as well as service and product providers and vendors, and individuals who are employed by or represent the foregoing (collectively, "Business Relationships"); and (iii) in the course of his employment with Amtech, Employee has become and will continue to become aware of and familiar with proprietary, secret, and Confidential Information relating to Amtech and its Business. This "Confidential Information" includes, but is not limited to, proprietary software systems, information concerning internal Business Activities, financial results of operations, contractual and prospective Business Relationships, financial data and records, marketing procedures, Customer lists, information, and requirements, vendor lists, information, and requirements, compilations of information, programming strategies and techniques, methods of doing Business, design systems, business and marketing plans, and other documents and information that is used in the operation, technology, and Business of Amtech. Employee covenants and agrees that all of the foregoing information is required to be maintained in confidence for the continued success of Amtech, all of which proprietary, secret or confidential information constitutes "trade secrets" as that phrase is defined and applied under any applicable federal or state statute or the common law. Employee further covenants and agrees that Amtech's trade secrets will not be misappropriated by Employee at any time, before or after Employee's employment with Amtech, and will remain the sole and exclusive property of Amtech after the termination of his employment, and that he will not, without the prior written consent of Amtech, while employed, or at any time after termination of employment, directly or indirectly, (v) misappropriate or otherwise make any use of such trade secrets or Confidential Information except as may be required in the course of his employment hereunder; or (w) release or otherwise divulge such trade secrets or any other proprietary, secret, or Confidential Information of Amtech to any third party, except as is reasonably necessary in furtherance of his employment duties hereunder.

(d) Notification to Subsequent Employer. If, following termination of Employee's employment with Amtech, Employee accepts other employment or enters into a business relationship with any entity which competes with Amtech by engaging in the Business Activities of Amtech, Employee expressly authorizes and consents to Amtech's informing such competing business of the terms of Paragraph 4 of this Agreement by written notice.

(e) Reasonableness and Remedies. Employee agrees that the length of time and geographic restrictions, and the other covenants and restrictions, in this Paragraph 4 are necessary and reasonable to protect Amtech's protectable interests, including but not limited to its Confidential Information, goodwill, and relationships with its customers, vendors, and referral sources, which Employee agrees are sufficient for protection under Arizona law, that any violation thereof would result in substantial and irreparable injury to Amtech, and that Amtech may not have an adequate remedy at law with respect to any such violation. Accordingly, Employee agrees that, in the event of any actual or threatened violation thereof, Amtech shall have the right to obtain, in addition to any other remedies that may be available, judicial equitable relief, including temporary and permanent injunctive relief, to cease or prevent any actual or threatened violation of any provision hereof.

(f) Blue Pencil Provision. Employee agrees that he has carefully read and considered the covenants and restrictions set forth in this Paragraph 4, and acknowledges they are fair and reasonable and are reasonably required to protect the legitimate business interests of Amtech and do not prevent him from earning a livelihood. Employee agrees that, if the scope of enforceability of any or all of the restrictive covenants set forth in this Agreement is in any way disputed at any time, a court or arbitrator may modify and enforce the covenant(s) to the extent it believes to be reasonable under the circumstances existing at that time. In particular, if the Restricted Period is unreasonably long, then it shall be reduced to six (6) months. If the Restricted Territory is unreasonably broad, it shall be reduced to North America.

(g) Tolling. If Employee violates the obligations contained in this Paragraph 4, the time period herein shall be extended by a period of time equal to that period beginning when the activities constituting such violation commenced and ending when the activities constituting such violation terminated.

(h) Amtech and Subsidiaries. For purposes of Paragraph 4 of this Agreement, “Amtech” shall include its subsidiaries as well as the company.

5. Release. In consideration of Amtech's covenants and agreements herein, Employee hereby unconditionally, irrevocably and absolutely releases and discharges Amtech and, as applicable, all of the present and former employees, officers, directors, partners, members, managers, agents, advisors, consultants, attorneys, insurers, owners, direct or indirect parent or subsidiary entities and their predecessors and/or affiliates, successors and/or assigns (collectively, the “Released Parties”), of and from all manner of claim, suit, lien, damage or demand of whatsoever kind, nature or description, whether known or unknown, suspected or unsuspected, which Employee ever had or now has against the Released Parties, which arose prior and up to the date this Agreement is signed by Employee, and arising out of any manner or thing or in any way connected with, directly or indirectly, the acts or omissions of Amtech, including but not limited to Employee's employment with Amtech and this Agreement, and all losses, liabilities, claims, charges, demands and causes of action arising directly or indirectly out of or in any way connected with the facts or circumstances of Employee's employment by Amtech. This general release is intended to have the broadest possible application and includes, but is not limited to, any and all tort, contract, common law, constitutional and statutory claims, including without limitation any claims or alleged violations of Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Americans with Disabilities Act, the Employee Retirement Income Security Act, the Equal Pay Act, the Fair Labor Standards Act, the Family and Medical Leave Act, the Age Discrimination in Employment Act (all as amended), comparable or similar Arizona employment protection or anti-discrimination statutes, and any and all statutory or common law provisions relating to or affecting Employee's employment by Amtech, or the termination thereof, and all claims for attorneys' fees, costs and expenses. Employee expressly waives his right to recovery of any type, including damages or reinstatement, in any administrative or court claim, whether local, state, or federal, and whether brought by him or on his behalf, related in any way to the matters released herein. However, this release is not intended to and does not bar any claims that, by statute, may not be waived by law, such as claims for workers' compensation benefits, unemployment insurance benefits, or statutory indemnity. Employee is not prohibited from filing a charge with any government agency, including the U.S. Equal Employment Opportunity Commission (“EEOC”) or similar state or local administrative agency, or participating in any governmental investigation, so long as Employee does not seek reinstatement or monetary damages, remedies or relief as to any claim released or any right which is hereby waived. Employee does forever waive the right to recover any damages should any local, state or federal agency pursue a claim on Employee's behalf against the Released Parties relating to Employee's employment with Amtech. Employee acknowledges that Amtech has paid him all wages and other compensation currently due to him.

6. Review and Revocation.

(a) Review. A copy of this Agreement was delivered to Employee on June 10, 2013. Employee is advised that Employee has forty-five (45) days from the date this Agreement was delivered to Employee to consider this Agreement. If Employee executes this Agreement before the expiration of forty-five (45) days, Employee acknowledges that Employee has done so for the purpose of expediting the payment of the consideration provided for herein, and that Employee has expressly waived Employee's right to take forty-five (45) days to consider this Agreement.

(b) Revocation. Employee may revoke this Agreement for a period of seven (7) days after Employee signs it. Employee agrees that if Employee elects to revoke this Agreement, Employee will notify Company, in writing (care of Bradley C. Anderson, 131 South Clark Drive, Tempe, Arizona 85281), on or before the expiration of the revocation period. Receipt of proper and timely notice of revocation by Amtech as provided herein cancels and voids this Agreement. Provided that Employee does not provide notice of revocation, this Agreement will become effective upon expiration of the revocation period, as of the Effective Date.

(c) Knowing and Voluntary; ADEA Waiver. Employee represents and warrants that Employee was advised by Amtech to consult with an attorney of Employee's own choosing concerning the provisions set forth herein, and that Employee has thoroughly discussed all aspects of this Agreement with counsel of Employee's choosing, or that Employee has had the opportunity to do so. Employee further represents and warrants that Employee has carefully read and fully understands all of the provisions of this Agreement, including the fact that Employee is releasing all claims and potential claims against Amtech and the other Released Parties, and that Employee is entering into this Agreement without coercion, and with full knowledge of its significance and the legal consequences thereof. Employee represents and warrants that as part of this Agreement, Employee is knowingly and voluntarily releasing and waiving any claims Employee believes Employee may have under the Age Discrimination in Employment Act as of the Effective Date.

(d) The waiver and release herein do not waive any claims that may arise after the Effective Date of this Agreement. This Agreement will only become effective if signed within forty-five (45) days after presentment and not revoked within seven (7) days thereafter. Employee agrees that he enters into this Agreement voluntarily and under no coercion or duress. Amtech's obligations hereunder are expressly conditioned upon Employee's signing and not revoking this Agreement.

(e) Employee acknowledges and agrees that the waiver and release herein is given only in exchange for consideration in addition to anything of value to which Employee is already entitled.

(f) Employee acknowledges and agrees that he has been provided with information, set forth in Exhibit B hereto, regarding persons to whom an employment termination arrangement is being offered and those to whom it is not being offered.

7. Miscellaneous.

(a) Notices. All notices required or permitted to be given hereunder shall be in writing and shall be deemed given when delivered in person, by facsimile transmission, or overnight courier service, or three (3) business days after being deposited in the United States mail, postage prepaid, registered or certified mail, addressed as follows:

If to Amtech:
Bradley C. Anderson
Chief Financial Officer
Amtech Systems, Inc.
131 South Clark Drive
Tempe, Arizona 85281
with a copy to (which shall not constitute notice):
Donald A. Wall
Squire Sanders (US) LLP

1 East Washington Street, Suite 2700
Phoenix, Arizona 85004

If to Employee:

Jeong-Mo (James) Hwang

____

____

Either party may alter the address to which notices or communications are to be sent by giving notice of such change of address in conformity with the provisions of this Section 7(a) for the giving of notice.

(b) Waiver. Neither any failure nor any delay on the part of either party hereto to exercise any right, remedy, power, or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power, or privilege preclude any other or further exercise of the same or of any other right, remedy, power, or privilege, nor shall any waiver of any right, remedy, power, or privilege with respect to any occurrence be construed as a waiver of such right, remedy, power, or privilege with respect to any other occurrence.

(c) Governing Law and Venue. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Arizona without regard to the conflicts of laws principles of such state. The parties agree that any claim, action, complaint, lawsuit, or other dispute arising between the parties related to the terms of this Agreement shall be brought and heard in the federal or state courts located in Maricopa County, Arizona. Amtech and Employee expressly consent to the exercise of personal jurisdiction over it and him by such courts.

(d) Binding Nature of Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, assigns, attorneys, agents, officers, subsidiaries, and affiliates, except that Employee may not assign or transfer his rights or obligations under this Agreement without the prior written consent of Amtech.

(e) Provisions Severable. The provisions of this Agreement are independent of and severable from each other, and no provision shall be affected or rendered invalid or unenforceable by virtue of the fact that for any reason any other or others of them may be invalid or unenforceable in whole or in part.

(f) Entire Agreement. This Agreement contains the entire understanding between the parties hereto with respect to the employment of Employee by Amtech and the other subject matter of this Agreement, and supersedes all prior and contemporaneous agreements and understandings, inducements, and conditions, express or implied, oral or written, with respect to said employment and other subject matter. The express terms hereof control and supersede any course of performance and/or usage of the trade inconsistent with any of the terms hereof. This Agreement may not be modified or amended other than by an agreement in writing signed by both parties.

(g) Section Headings. The section headings in this Agreement are for convenience only; they form no part of this Agreement and shall not affect its interpretation.

(h) Construction. The parties hereto acknowledge and agree that each party has participated in the drafting of this Agreement and has had the opportunity to have this document reviewed by the respective legal counsel for the parties hereto and that a rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be applied to the interpretation of this Agreement. No inference in favor of, or against, any party shall be drawn from the fact that one party has drafted any portion hereof.

(i) Consultation with Attorney. Employee acknowledges that he was advised by Amtech to consult with an attorney of his choosing prior to executing this Agreement, and he has had the opportunity to do so.

(j) Execution in Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, and all of which shall together constitute one and the same instrument. This Agreement shall become binding when one or more counterparts hereof, individually or taken together, shall bear the signatures of the parties reflected hereon as the signatories.

(k) Successors and Assigns. This Agreement shall be binding on the parties' successors, heirs, and assigns.

(l) Attorneys' Fees and Costs. Except as otherwise provided herein, in the event of any claim, controversy or dispute arising out of or relating to this Agreement, or the breach hereof, the prevailing party shall be entitled to recover its reasonable attorneys' fees and costs in connection with any court proceeding.

(m) Survival. The provisions in this Agreement that contemplate obligations on Employee's part after his employment with Amtech ends, for whatever reason, shall survive the cessation of his employment and the termination of this Agreement.

(n) Dispute Resolution. Any dispute arising out of or related to the interpretation, meaning or enforcement of this Agreement shall be decided by a single arbitrator in an arbitration, under the auspices of the American Arbitration Association, located in Phoenix, Arizona, subject, however, to the right of Amtech to seek and obtain injunctive or other expedited relief in courts located in Maricopa County, Arizona.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the Effective Date above written.

Amtech Systems, Inc.

By: _/s/Bradley C. Anderson____________________________
Name: Bradley C. Anderson____________________________
Its:____

_/s/Jeong-Mo Hwang____
Jeong-Mo (James) Hwang

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: August 8, 2013

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: August 8, 2013

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 June 30, 2013, 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: August 8, 2013

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 June 30, 2013, 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: August 8, 2013

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.