

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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

March 11, 2010
Date of Report (Date of earliest event reported)

Amtech Systems, Inc.
(Exact name of registrant as specified in its charter)

Arizona	000-11412	86-0411215
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS 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

Not applicable.

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-

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

(c) Appointment of Certain Officers.

Appointment of Fokko Pentinga as President of the Company

On March 11, 2010, the Board of Directors (the “Board”) of Amtech Systems, Inc. (the “Company”) promoted Fokko Pentinga, age 55, appointing him as President of the Company. Since December of 2008, Mr. Pentinga has served as Managing Director of Amtech Europe, which is comprised of the Company’s two European subsidiaries, Tempres Systems (“Tempres”) in Vaassen, the Netherlands, and R2D Automation (“R2D”) near Montpellier, France. During that time Mr. Pentinga also served as General Manager of Tempres (a position he has held for the past 15 years) and President of R2D (a position he has held for the past 2 years). Mr. Pentinga has over 30 years of experience in the semiconductor and solar industries.

The Company’s press release regarding the promotion of Mr. Pentinga is attached as Exhibit 99.1.

(e) Compensatory Arrangements of Certain Officers.

Non-Employee Directors Stock Option Plan Amendments

The Board previously approved, subject to shareholder approval, amendments to the Company’s Non-Employee Directors Stock Option Plan (the “Director Plan”) that would (1) authorize an additional 150,000 shares of Common Stock for issuance under the plan, increasing the authorized number of shares from 200,000 to 350,000, (2) extend the plan termination date from July 8, 2015 to the date that is 10 years after the effective date of the amendment to the Director Plan, and (3) make certain other amendments, including amendments to the definition of “Fair Market Value” and certain other changes in order to ensure the Director Plan complies with Section 409A of the Internal Revenue Code and other applicable laws and regulations. According to the results from the Company’s Annual Meeting of Shareholders held on March 11, 2010 (the “Annual Meeting”), the Company’s shareholders approved these amendments to the Director Plan. The foregoing description of the amendments is qualified in its entirety by the text of the amended version of the Director Plan, which is filed as Exhibit 10.1 hereto and incorporated herein by reference.

2007 Employee Stock Incentive Plan Amendments

The Board previously approved, subject to shareholder approval, amendments to the Company’s 2007 Employee Stock Incentive Plan (the “Employee Plan”), that would (1) authorize an additional 900,000 shares of Common Stock for issuance under the plan, increasing the authorized number of shares from 500,000 to 1,400,000; (2) extend the plan termination date from July 8, 2015 to the date that is ten years after the effective date of the amendment to the Employee Plan, and (3) make certain other amendments in order to ensure the plan complies with Section 409A of the Internal Revenue Code and other applicable laws and regulations. According to the results from the Annual Meeting, the Company’s shareholders approved these amendments to the Employee Plan. The foregoing description of the amendments is qualified in its entirety by the text of the amended version of the Employee Plan, which is filed as Exhibit 10.2 hereto and incorporated herein by reference.

Employment Agreement with the Company's Chief Executive Officer, Jong S. Whang

On March 11, 2010, the Board approved an Amended and Restated Employment Agreement (the "Employment Agreement") between the Company and Jong S. Whang, the Company's Chief Executive Officer. The term of the Employment Agreement is three (3) years, which may be extended by the parties. Mr. Whang's base salary shall be \$350,000 (as determined by the Board and reported in December 2009), which shall be reviewed and may be increased by the Compensation Committee (the "Compensation Committee") of the Board on an annual basis. Mr. Whang shall be eligible for annual cash bonuses in accordance with the annual bonus plan adopted by the Compensation Committee, restricted stock and stock option grants as determined by the Compensation Committee. Additionally, Mr. Whang will be provided a car allowance and life insurance.

In the event of termination of the Employment Agreement for other than cause, Mr. Whang's restricted stock and stock options would vest. He would also receive payment of his salary, his cash bonus and his accrued vacation through the date of such termination and a lump sum severance payment consisting of: (a) his base salary for the greater of 2 years or the remainder of the initial 3 year term and (b) his maximum cash bonus under the annual bonus plan. Mr. Whang would also earn 40% of his salary in exchange for making himself available to serve on the board and to consult with the Company.

The foregoing description is qualified in its entirety by the text of the Employment Agreement, which is filed as Exhibit 10.3 hereto and incorporated herein by reference.

Amendment to the Change of Control Agreement with the Company's Chief Accounting Officer, Robert T. Hass

On March 11, 2010, the Board approved an Amended and Restated Change of Control and Severance Agreement (the "Change of Control Agreement") between the Company and Robert T. Hass, the Company's Chief Accounting Officer. The amendment was made to conform the terms of the Change of Control Agreement to the change of control provisions contained in the employment agreements of the Company's other executive officers. In particular, the amendment provides for the vesting of Mr. Hass's restricted stock upon the occurrence of certain events. The foregoing description is qualified in its entirety by the text of the Change of Control Agreement, which is filed as Exhibit 10.4 hereto and incorporated herein by reference.

Item 5.07 Submission of Matters to a Vote of Security Holders

At the Annual Meeting, management Proposals 1, 2, 3 and 4 were approved. The Proposals below are described in detail in the Company's definitive proxy statement dated January 29, 2010 for the Annual Meeting. For Proposal 1, only "FOR" votes were counted for purposes of determining the six nominees who received a plurality of the votes cast at the Annual Meeting. For Proposals 2, 3 and 4, only "FOR" and "AGAINST" votes were counted for purposes of determining the votes received in connection with each proposal. Therefore, broker non-votes and abstentions had no effect on any of the Proposals.

The results are as follows:

Proposal 1

The individuals listed below received the highest number of affirmative votes of the outstanding shares of the Company's common stock present or represented by proxy and voting at the Annual Meeting and were elected at the Annual Meeting to serve a one-year term on the Board.

	<u>For</u>	<u>Authority Withheld</u>
Jong S. Whang	4,564,887	139,445
Michael Gamreiter	4,204,799	499,533
Alfred W. Giese	4,522,177	182,155
Egbert Jan Geert Goudena	4,599,962	104,370
Jeong Mo Hwang	4,522,274	182,058
Robert F. King	4,521,739	182,593

Proposal 2

The management proposal to ratify the appointment of Mayer Hoffman McCann P.C. as the Company's independent registered public accounting firm for fiscal year 2010, as described in the proxy materials. This Proposal was approved with approximately 99.89% of the shares present or represented and voting at the Annual Meeting voting for the Proposal and approximately 0.11% of the shares voting against the Proposal.

<u>For</u>	<u>Against</u>	<u>Abstained</u>
6,852,857	8,020	19,950

Proposal 3

The management proposal to amend the Director Plan, as described in the proxy materials. This Proposal was approved with approximately 87.56% of the shares present or represented and voting at the Annual Meeting voting for the Proposal and approximately 12.44% of the shares voting against the Proposal.

<u>For</u>	<u>Against</u>	<u>Abstained</u>
4,066,844	577,808	59,680

Proposal 4

The management proposal to amend the Employee Plan, as described in the proxy materials. This Proposal was approved with approximately 75.77% of the shares present or represented and voting at the Annual Meeting voting for the Proposal and approximately 24.23% of the shares voting against the Proposal.

<u>For</u>	<u>Against</u>	<u>Abstained</u>
3,545,339	1,133,957	25,036

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

The following exhibits are furnished herewith:

Exhibit Number	Description
10.1	Amtech Systems, Inc. Non-Employee Directors Stock Option Plan, as amended through March 11, 2010.
10.2	Amtech Systems, Inc. 2007 Employee Stock Incentive Plan, as amended through March 11, 2010.
10.3	Amended and Restated Employment Agreement between the Company and Jong S. Whang.
10.4	Amended and Restated Change of Control and Severance Agreement between the Company and Robert T. Hass.
99.1	Press Release regarding the Appointment of Fokko Pentinga as President of Amtech Systems, Inc.

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 hereunto duly authorized.

AMTECH SYSTEMS, INC.

Date: March 17, 2010

By: /s/ Bradley C. Anderson
Name: Bradley C. Anderson
Title: Vice President and Chief
Financial Officer

AMTECH SYSTEMS, INC.

NON-EMPLOYEE DIRECTORS STOCK OPTION PLAN
AS AMENDED EFFECTIVE JULY 8, 2005 AND
AS FURTHER AMENDED EFFECTIVE MARCH 11, 2010

Purposes of the Plan

The purposes of this Plan are to attract and retain the best available individuals to serve as non-employee members of the Board of Directors of Amtech Systems, Inc. (the "Company"), to reward such directors for their contributions to the profitable growth of the Company, and to maximize the identity of interest between such directors and stockholders generally. The Plan is intended to fall within an exception to coverage under Section 409A of the Internal Revenue Code.

1. Definitions. As used herein, the following definitions shall apply:

a. "Board" shall mean the Board of Directors of the Company.

b. "Company" shall mean Amtech Systems, Inc., an Arizona corporation.

c. "Effective Date" shall be the date that the Board of Directors of the Company adopts this Plan.

d. "Eligible Director" shall mean (i) those individuals who are serving as non-employee members of the Board on the Effective Date, or (ii) those individuals who are elected or appointed as non-employee members of the Board after the Effective Date, whether through appointment by the Board or election of the Company's stockholders.

e. "Exercise Price" shall mean, with respect to Shares of Optioned Stock, the Fair Market Value of such Shares on the date of grant of the Option.

f. "Fair Market Value" shall mean, with respect to the date a given Option is granted or exercised, the value of the Common Stock determined by the Board in such manner as it may deem equitable for Plan purposes in accordance with applicable law, including Section 409A of the Internal Revenue Code; provided, however, that where there is a public market for the Common Stock, the Fair Market Value per Share shall be the closing price for a Share reported for the last trading day prior to such date by the NASDAQ Stock Market (or such other stock exchange or quotation system on which Shares are then listed or quoted) or, if no Shares are traded on the NASDAQ Stock Market (or such other stock exchange or quotation system) on the date in question, then for the next preceding date for which Shares traded on the NASDAQ Stock Market (or such other stock exchange or quotation system).

g. "Option" shall mean a right to purchase Stock, granted pursuant to the Plan.

h. "Optioned Stock" shall mean the Stock subject to an Option.

i. "Optionee" shall mean a non-employee director of the Company who has been granted an Option.

j. "Plan" shall mean this Non-Employee Directors Stock Option Plan.

k. "Share" shall mean a share of the Stock.

l. "Stock" shall mean the Common Stock of the Company described in the Certificate of Incorporation of the Company.

m. "Stock Option Agreement" shall mean the written agreement evidencing the grant of an Option.

n. "Trading Day" shall mean a day on which the Fair Market Value of the Stock can be determined.

2. Common Stock Subject to the Plan. Subject to increases and adjustments pursuant to Section 9 of the Plan, the number of Shares reserved and available for distribution under the Plan shall be Three Hundred Fifty Thousand (350,000). If an Option shall expire or become unexercisable for any reason without having been exercised in full, the unauthorized Shares covered by the Option shall, unless the Plan shall have terminated, be available for future grants of Options. The Company shall use its best efforts to provide that any Stock subject to the Option constitutes, or is equivalent to, "service recipient stock" within the meaning of Internal Revenue Code Section 409A.

3. Option Grants.

a. Each individual who first becomes an Eligible Director after the Effective Date, whether through election by the stockholders or appointment of the Board, shall be granted at the time of such initial election or appointment, or on such other date as may be determined by the Board, an Option to purchase 6,000 shares of Stock, or such other number of shares of Stock as may be determined by the Board.

b. On the first business day following the Company's Annual Meeting of Shareholders each year (the "Annual Grant Date"), beginning with the first business day following the 2005 Annual Meeting of Shareholders, or at such other date as may be determined by the Board, each individual who is at that time an Eligible Director shall be granted an Option under the Plan to purchase an additional 5,000 shares of Stock, or such other number of shares of Stock may be determined by the Board; provided such individual (i) has attended 75% of the meetings of the Board held during the 12-month period immediately preceding the Annual Grant Date, or (ii) if such individual was appointed or elected as a director during such 12-month period, he or she has attended 75% of the meetings of the Board held during his or her term as a director, and (iii) has attended 75% of the meetings of any Committee of the Board to which such individual has been appointed as a member during such 12-month period.

c. The purchase price of Shares subject to an Option shall be the Fair Market Value on the date of grant. Subject to Section 8, the Board shall not permit the repricing of any Option by any method, including by cancellation and reissuance.

d. Each Option granted pursuant to this Plan shall vest and become exercisable according to the following schedule, provided that the Optionee remains an Eligible Director at such vesting date:

Vesting Date	Percentage of Shares Vesting
First Anniversary of Grant	33-1/3%
Second Anniversary of Grant	66-2/3%
Third Anniversary of Grant	100%

(e) Notwithstanding any other provision of this Plan to the contrary, in the event of a departure of a director, due to resignation or otherwise, the Board shall have discretion to grant to such departing director an Option or Options to purchase such number of shares of Stock as the Board may determine and to fix the vesting and exercisability dates with respect thereto in recognition of such departing director's service on the Board or any Committee thereof.

(f) No Deferral Feature. No Option shall have any feature that would allow for the deferral of compensation (within the meaning of Internal Revenue Code Section 409A) other than the deferral of recognition of income until the later of the exercise or disposition of the Option or the time the shares of Stock acquired subject to the exercise of the Option first become substantially vested (as defined in Treasury Regulation section 1.83-3(b)).

4. Stockholder Approval. This Plan was adopted by the Board of Directors of the Company on December 21, 1995 (the "Effective Date") and approved by the shareholders on February 29, 1996. The Board approved certain amendments to the Plan on March 15, 2001 and April 21, 2005. The shareholders approved certain amendments to the Plan on July 8, 2005. Options may be granted under the Plan on and after the Effective Date. No Option may be granted after March 11, 2020; provided, however, that the Plan and all outstanding Options shall remain in effect until such Options shall have been exercised, shall have expired or shall otherwise be terminated.

5. Term; Exercise; Rights as a Stockholder.

a. The term of each Option shall be ten (10) years from the date of grant thereof. To the extent vested the Option may be exercised in whole or in part at any time and during the term of the Option. No fractional Shares will be issued upon exercise of the Option and, if the exercise results in a fractional interest, an amount will be paid in cash equal to the value of such fractional interest based on the Fair Market Value of the Shares on the date of exercise.

b. An Option shall be deemed to be exercised upon receipt by the Company from the Optionee of written notice of such exercise. Such notice shall be accompanied by full payment for the Shares subject to such exercise.

6. Payment. The Exercise Price shall be paid:

- a. In United States dollars in cash or by check payable to the order of the Company; or
- b. Subject to the approval of the Board, by delivery of Shares with an aggregate Fair Market Value equal to the Exercise Price; or
- c. By any combination of (a) and (b) above.

The Board shall determine acceptable methods for tendering Stock as payment upon exercise of an Option and may impose such limitations and prohibitions on the use of Stock to exercise an Option as it deems appropriate.

7. Transferability of Options. The Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent and distribution to the limited extent provided herein or pursuant to a "qualified domestic relations order" as defined by the Internal Revenue Code or the Employee Retirement Income Security Act or the rules thereunder. Except as permitted herein, an Option may be exercised, during the lifetime of the Optionee, only by the Optionee or by his guardian or legal representative.

In the event of the Optionee's death, his or her Option shall be exercisable, prior to the expiration of the Option, by the person or persons to whom his or her accrued and vested rights pass by will or by the laws of descent and distribution.

8. Adjustments Upon Changes in Capitalization or Merger. Subject to any required action by the stockholders of the Company, the number of Shares covered by each outstanding Option, and the number of Shares which have been authorized for issuance under the Plan but as to which no Options have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per Share covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued Shares resulting from a stock split, reverse stock split, consolidation, subdivision, stock dividend, combination or reclassification of the Shares, or any other increase or decrease in the number of issued Shares effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made, with respect to the number or price of Shares subject to an Option.

In the event of the proposed dissolution or liquidation of the Company, all Options will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Board. The Board may, in the exercise of its sole discretion in such instances, declare that any Option shall terminate as of a date fixed by the Board and give each holder the right to exercise the Option as to all or any part thereof, including Shares as to which the Option would not otherwise be exercisable. In the event of a proposed sale of all or substantially all of the assets of the Company, or the merger of the Company with or into another corporation, the Option shall be assumed or an equivalent Option shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation, unless the Board determines, in the exercise of its sole discretion and in lieu of such assumption or substitution, that the holder shall have the right to exercise the Option as to all of the Shares, including Shares as to which the Option would not otherwise be exercisable. If the Board makes an Option exercisable in lieu of assumption or substitution in the event of a merger or sale of assets, the Board shall notify the holder that the Option shall be fully exercisable for a period of 30 days from the date of such notice (but not later than the expiration of the term of the Option), and the Option will terminate upon the expiration of such period.

9. Amendment and Termination of the Plan. The Board may amend the Plan from time to time in such respects as the Board may deem advisable or terminate the Plan; provided, however, that amendments to the Plan relating to the amount, price or timing of Option grants shall not be made more than once in any six month period, other than amendments necessary to comply with changes in the Internal Revenue Code of 1986, as amended, the Employee Retirement Income Security Act, as amended, or the rules thereunder. Any amendment or termination of the Plan shall not affect Options already granted and such Options shall remain in full force and effect as if this Plan had not been amended or terminated.

Notwithstanding the foregoing, revisions or amendments that accomplish any of the following shall require approval of the stockholders of the Company, to the extent required by law, rule or regulation:

a. Materially increase the benefits accruing to participants under the Plan;

b. Materially increase the number of Shares which may be issued under the Plan;

c. Materially modify the Plan as to eligibility for participation in the Plan; or

d. Otherwise cause the Plan to lose its exemption under Section 16(b) of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

10. Conditions Upon Issuance of Shares. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange or market system upon which the Shares may be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the Optionee to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required or advisable.

Inability of the Company to obtain authority from a regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary or advisable to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

11. Termination of Option.

a. Termination as a Director. If an Optionee ceases to be a director, unless such cessation occurs due to death or disability, then the Option shall terminate on the date that is thirty (30) days from the date the Optionee ceases to be a director, or such other date as may be determined by the Board.

b. Disability. Unless otherwise provided in the Stock Option Agreement, in the event an Optionee is unable to continue to be a member of the Board as a result of his permanent and total disability (as defined in Section 22(e)(3) of the Internal Revenue Code of 1986, as amended), he may exercise the Option at any time within twelve (12) months following the date he ceased to be a director, but only to the extent he was entitled to exercise it on the date he ceased to be a director. To the extent that he was not entitled to exercise the Option on the date he ceased to be a director, or if he does not exercise such Option (which he was entitled to exercise) within the time specified herein, the Option shall terminate.

c. Death. Unless otherwise provided in the Stock Option Agreement, if an Optionee dies during the term of the Option, the Option may be exercised at any time within twelve (12) months following the date of death, but only to the extent that an Optionee was entitled to exercise the Option on the date of death. To the extent that decedent was not entitled to exercise the Option on the date of death, or if the Optionee's estate, or person who acquired the right to exercise the Option by bequest or inheritance, does not exercise such Option (which he was entitled to exercise) within the time specified herein, the Option shall terminate.

12. Option Agreement. Options shall be evidenced by Stock Option Agreements in such form as the Board shall approve.

13. Miscellaneous Provisions.

a. Plan Expense. Any expenses of administering this Plan shall be borne by the Company.

b. Construction of Plan. The validity, construction, interpretation, administration and effect of the Plan and of its rules and regulations, and rights relating to the Plan, shall be determined by the Board in accordance with the laws of the State of Arizona.

c. Taxes. The Company shall be entitled if necessary or desirable to pay or withhold the amount of any tax attributable to the delivery of Common Shares under the Plan after giving the person entitled to receive such Shares notice as far in advance as practical, and the Company may defer making delivery of such Shares if any such tax may be pending unless and until indemnified to its satisfaction. Notwithstanding any other provision of the Plan, the tax treatment of awards under the Plan shall not be, and is not, warranted or guaranteed. Neither the Company, any subsidiary or affiliate, the Board, any committee thereof, nor any of their delegates shall be held liable for any taxes, penalties, or other monetary amounts owed by an Optionee, his beneficiary, or other person as a result of the grant, modification, or amendment of an award hereunder or the adoption, modification, amendment, or administration of the Plan.

d. Gender. For purposes of this Plan, words used in the masculine gender shall include the female and neuter, and the singular shall include the plural and vice versa, as appropriate.

NON-EMPLOYEE DIRECTORS STOCK OPTION AGREEMENT

EXHIBIT A

AMTECH SYSTEMS, INC.

NON-EMPLOYEE DIRECTORS STOCK OPTION AGREEMENT

BY THIS DIRECTORS STOCK OPTION AGREEMENT (the "Agreement"), AMTECH SYSTEMS, INC., an Arizona corporation (the "Company"), and the undersigned, a non-employee director of the Company (the "Optionee"), desire to establish the terms and conditions upon which the Company is willing to grant the Optionee, and upon which the Optionee is willing to accept from the Company, an Option to purchase shares of Common Stock from the Company, pursuant to the terms and conditions of the Company's Non-Employee Directors Stock Option Plan (the "Plan").

The Company and the Optionee hereby agree as follows:

1. The Plan. All the terms, conditions and definitions of the Plan are hereby incorporated by reference into this Agreement, as if fully set forth herein.

2. Terms of Grant.

(a) Exercise Price: \$ _____

(b) Number of Shares Subject to Option: _____ Shares of Common Stock

(c) Grant Date: _____, _____

DATED: _____, _____

AMTECH SYSTEMS, INC.

By _____

Its _____

OPTIONEE:

**2007 EMPLOYEE STOCK
INCENTIVE PLAN
OF
AMTECH SYSTEMS, INC.**

As Amended Effective March 11, 2010

Section 1. Purpose of Plan

The purpose of this 2007 Employee Stock Incentive Plan (this "Plan") of Amtech Systems, Inc., an Arizona corporation (the "Company"), is to enable the Company and any subsidiary corporation (as the term is defined in Code Section 424(f), hereinafter each a "Subsidiary" or the plural "Subsidiaries") to attract, retain and motivate their officers and other key employees, and to further align the interests of such persons with those of the stockholders of the Company by providing for or increasing the proprietary interest of such persons in the Company. The Plan is intended to fall within an exception to coverage under Section 409A of the Internal Revenue Code.

Section 2. Administration of Plan

2.1 *Composition of Committee.* This Plan shall be administered by the Compensation and Option Committee of the Board of Directors (the "Committee"), as appointed from time to time by the Board of Directors. The Committee shall act pursuant to a majority vote or unanimous written consent. The Board of Directors, in its sole discretion, may exercise any authority of the Committee under this Plan in lieu of the Committee's exercise thereof. Notwithstanding the foregoing, with respect to any Award that is intended to satisfy the conditions of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") or Section 162(m)(4)(C) of the Internal Revenue Code of 1986, as amended (the "Code"), the Committee may appoint one or more separate committees (any such committee, a "Subcommittee") composed of one or more directors of the Company (who may but need not be members of the Committee) and may delegate to any such Subcommittee(s) the authority to grant Awards, as defined in Section 5.1 hereof, under the Plan to Eligible Employees, to determine all terms of such Awards, and/or to administer the Plan or any aspect of it. Any action by any such Subcommittee within the scope of such delegation shall be deemed for all purposes to have been taken by the Committee. The Committee may designate the Secretary of the Company or other Company employees to assist the Committee in the administration of the Plan, and may grant authority to such persons to execute agreements or other documents evidencing Awards made under this Plan or other documents entered into under this Plan on behalf of the Committee or the Company.

2.2 *Powers of the Committee.* Subject to the express provisions of this Plan, the Committee shall be authorized and empowered to do all things necessary or desirable, in its sole discretion, in connection with the administration of this Plan, including, without limitation, the following:

(a) to prescribe, amend and rescind rules and regulations relating to this Plan and to define terms not otherwise defined herein; provided that, unless the Committee specifies otherwise, for purposes of this Plan (i) the term "fair market value" shall mean, as of any date, the closing price for a Share (as defined in Section 3.1) reported for the last trading day prior to such date by the NASDAQ Stock Market (or such other stock exchange or quotation system on which Shares are then listed or quoted) or, if no Shares are traded on the NASDAQ Stock Market (or such other stock exchange or quotation system) on the date in question, then for the next preceding date for which Shares traded on the NASDAQ Stock Market (or such other stock exchange or quotation system); and (ii) the term "Company" shall mean the Company and its Subsidiaries, unless the context otherwise requires;

(b) to determine which persons are Eligible Employees (as defined in Section 4), to which of such Eligible Employees, if any, Awards shall be granted hereunder and the timing of any such Awards, and to grant Awards;

(c) to grant Awards to Eligible Employees and determine the terms and conditions thereof, including the number of Shares subject to Awards and the exercise or purchase price of such Shares and the circumstances under which Awards become exercisable or vested or are forfeited or expire, which terms may but need not be conditioned upon the passage of time, continued employment, the satisfaction of performance criteria, the occurrence of certain events (including events which the Board or the Committee determine constitute a change of control), whether such Award complies with Code Section 409A, Notice 2005-1, Proposed Treasury Regulations Sections 1.409-1 through 1.409-6, (and after December 31, 2007 (or sooner at the election of the Committee), Treasury Regulations Sections 1.409A-1 through 1.409A-6) or other factors;

(d) to establish, verify the extent of satisfaction of, adjust, reduce or waive any performance goals or other conditions applicable to the grant, issuance, exercisability, vesting and/or ability to retain any Award and to consider the effect of such actions on the qualification of an Award as an ISO.

(e) to prescribe and amend the terms of the agreements or other documents evidencing Awards made under this Plan (which need not be identical);

(f) to determine whether, and the extent to which, adjustments are required pursuant to Section 9;

(g) to interpret and construe this Plan, any rules and regulations under this Plan and the terms and conditions of any Award granted hereunder, and to make exceptions to any such provisions in good faith and for the benefit of the Company; and

(h) to make all other determinations deemed necessary or advisable for the administration of this Plan.

2.3 *Determinations of the Committee.* All decisions, determinations and interpretations by the Committee regarding this Plan shall be final and binding on all Eligible Employees. The Committee shall consider such factors as it deems relevant to making such decisions, determinations and interpretations including, without limitation, the recommendations or advice of any director, officer or employee of the Company and such attorneys, consultants and accountants as it may select.

Section 3. Stock Subject to Plan

3.1 *Aggregate Limits.* The aggregate number of shares of the Company's Common Stock, par value \$0.01 per share ("Shares"), issued pursuant to all Awards granted under this Plan shall not exceed One Million Four Hundred Thousand (1,400,000). The aggregate number of Shares available for issuance under this Plan and the number of Shares subject to outstanding Awards shall be subject to adjustment as provided in Section 9. The Shares issued pursuant to this Plan may be Shares that either were reacquired by the Company, including Shares purchased in the open market, or authorized but unissued Shares.

3.2 *Additional Limits.* The aggregate number of Shares subject to Options granted under this Plan during any calendar year to any one Eligible Employee shall not exceed 250,000 (taking into account the number of shares associated with an Option granted and then cancelled during such calendar year). The aggregate number of Shares issued or issuable under all Awards granted under this Plan, other than Options, during any calendar year to any one Eligible Employee shall not exceed 250,000 (taking into account the number of shares associated with the Awards other than Options granted and then cancelled during such calendar year). The foregoing limitations of this Section 3.2 shall not apply to the extent that they are no longer required in order for compensation in connection with grants of Awards under this Plan to be treated as "performance-based compensation" under Code Section 162(m) and, if no longer required, a change in such limitation shall not be subject to stockholder approval as required under Section 12 hereof. The aggregate number of Shares that may be issued pursuant to the exercise of ISOs granted under this Plan shall not exceed 1,400,000, which number shall be calculated and adjusted pursuant to Section 3.3 and Section 9 only to the extent that such calculation or adjustment will not (i) require shareholder approval under Reg. § 1.422-2(b)(3) or (ii) affect the status of any Option intended to qualify as an ISO under Code Section 422, or whether this Plan meets the requirements under Code Section 422(b)(1).

3.3 *Issuance of Shares.* For purposes of Section 3.1, the aggregate number of Shares issued under this Plan at any time shall equal only the number of Shares actually issued upon exercise or settlement of an Award and shall not include Shares subject to Awards that have been canceled, expired or forfeited or Shares subject to Awards that have been delivered (either actually or constructively by attestation) to or retained by the Company in payment or satisfaction of the purchase price or exercise price of an Award.

Section 4. Persons Eligible Under Plan

Any person who is an employee or prospective employee of the Company or any of its Subsidiaries shall be eligible to be considered for the grant of Awards hereunder; provided that the Award to such prospective employee is conditioned on the prospective employee's commencement of employment (an "Eligible Employee"); provided, however, with respect to ISOs granted under this Plan, the aggregate fair market value (determined at the time the ISO is granted) of the Shares with respect to which the ISOs are exercisable for the first time by the optionee during any calendar year (under the plans of the Company) shall not exceed \$100,000.00. If any ISO is granted that exceeds the limitations of this Section 4 at the first time it is exercisable, it shall not be invalid, but shall constitute, and be treated as, a Nonqualified Option to the extent of such excess. The status of the chairman of the Board of Directors as an "employee" shall be determined by the Committee.

Section 5. Plan Awards

5.1 *Award Types.* The Committee, on behalf of the Company, is authorized under this Plan to enter into certain types of arrangements with Eligible Employees and to confer certain benefits on them. The following arrangements or benefits are authorized under this Plan if their terms and conditions are not inconsistent with the provisions of this Plan: Options and Restricted Stock. Such arrangements and benefits are sometimes referred to herein as "Awards." The authorized types of arrangements and benefits for which Awards may be granted are defined as follows:

(a) Options. An Option is a right granted under Section 6 to purchase a number of Shares at such exercise price, at such times, and on such other terms and conditions as are specified in the agreement or terms and conditions or other document evidencing the Award (the "Option Document"). Options intended to qualify as Incentive Stock Options ("ISOs") pursuant to Code Section 422 and Options not intended to qualify as ISOs ("Nonqualified Options") may be granted under Section 6.

(b) Restricted Stock. Restricted Stock is an award or issuance of Shares under Section 7, subject to certain restrictions and the risk of forfeiture and terms as are expressed in the agreement or other document evidencing the Award.

5.2 *Grants of Awards.* An Award may consist of one such arrangement or benefit or two or more of them in tandem, and the terms as established by the Committee for all Awards granted hereunder may include performance standards derived from the Qualifying Performance Criteria (as defined in Section 8.2 hereof), and the receipt of any Award may be contingent on performance standards derived from the Qualifying Performance Criteria.

Section 6. Options

The Committee may grant an Option or provide for the grant of an Option, either from time to time in the discretion of the Committee or automatically upon the occurrence of specified events, including, without limitation, the achievement of performance goals, the satisfaction of an event or condition within the control of the recipient of the Award or within the control of others.

6.1 *Option Document.* Each Option Document shall contain provisions regarding (a) the number of Shares that may be issued upon exercise of the Option, (b) the purchase price of the Shares and the means of payment for the Shares, (c) the term of the Option, (d) such terms and conditions on the vesting and/or exercisability of an Option as may be determined from time to time by the Committee, (e) restrictions on the transfer of the Option and forfeiture provisions and (f) such further terms and conditions, in each case not inconsistent with this Plan as may be determined from time to time by the Committee. Option Documents evidencing ISOs shall contain such terms and conditions as may be necessary to qualify, to the extent determined desirable by the Committee, with the applicable provisions of Section 422 of the Code.

6.2 *Option Price.* Subject to the restriction set forth in the following sentence, the purchase price per share of the Shares subject to each Option granted under this Plan shall equal or exceed 100% of the fair market value of a Share on the date the Option is granted. The previous sentence notwithstanding, if, immediately before an Award intended to qualify as an ISO, an individual owns (or is treated as owning under the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company (or any related corporation within the meaning of Reg. § 1.421-1(i)(2)) employing the optionee, the purchase price shall be in no event less than one hundred ten percent (110%) of the stock's fair market value on the date of grant.

6.3 *Option Term.* The "Term" of each Option granted under this Plan, including any ISOs, shall be ten (10) years from the date of its grant, unless (i) the Company makes an Award intended to qualify as an ISO to an individual who owns (or is treated as owning under the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company (or any related corporation within the meaning of Reg. § 1.421-1(i)(2)) employing the optionee, in which case, the term shall be five (5) years from the date of its grant or (ii) the Committee provides for a lesser term.

6.4 *Option Vesting.* Options granted under this Plan shall be exercisable at such time and in such installments during the period prior to the expiration of the Option's Term as determined by the Committee. The Committee shall have the right to make the timing of the ability to exercise any Option granted under this Plan subject to continued employment, the passage of time and/or such performance requirements as deemed appropriate by the Committee.

6.5 *Termination of Status as and Employee.*

(a) Termination of Employment. Unless otherwise provided in an Award Agreement relating to an Option, if the employment of an Eligible Employee by the Company is terminated, whether voluntary or for cause, except if such termination occurs due to retirement, death or disability, the Option, to the extent not exercised, shall cease on the date on which Eligible Employee's employment by the Company is terminated. For purposes of this Section 6.5, an Eligible Employee who leaves the employ of the Company to become an employee of a subsidiary or parent corporation of the Company or a corporation which has assumed the Option of the Company as a result of a corporate reorganization, etc., shall not be considered to have terminated his employment. For purposes of this Section 6.5, the employment relationship of an employee of the Company or of a subsidiary corporation of the Company will be treated as continuing intact while he is on military or sick leave or other bona fide leave of absence (such as temporary employment by the government) if such leave does not exceed ninety (90) days, or, if longer, so long as his right to reemployment is guaranteed either by statute or by contract.

(b) Retirement. For purposes of the Plan, the retirement of an individual either pursuant to a pension or retirement plan adopted by the Company or at the normal retirement date prescribed from time to time by the Company, shall be deemed to be a termination of such individual's employment other than voluntary or for cause. If an Eligible Employee's termination is due to retirement, then the Eligible Employee may, but only within ninety (90) days after the date he ceases to be an employee of the Company, exercise his Option to the extent that he was entitled to exercise it at the date of such termination. To the extent that he was not entitled to exercise the Option at the date of such termination, or if he does not exercise such Option (which he was entitled to exercise) within the time specified herein, the Option shall terminate.

(c) Disability. Unless otherwise provided in an Award Agreement relating to an Option, in the event an Eligible Employee is unable to continue his employment with the Company as a result of his permanent and total disability (as defined in Section 22(e)(3) of the Code), he may, but only within one (1) year from the date of termination, exercise his Option to the extent he was entitled to exercise it at the date of such termination. To the extent that he was not entitled to exercise the Option at the date of termination, or if he does not exercise such Option (which he was entitled to exercise) within the time specified herein, the Option shall terminate.

(d) Death of Eligible Employee. Unless otherwise provided in an Award Agreement relating to an Option, if an Eligible Employee dies during the term of the Option and is at the time of his death an employee of the Company who shall have been in continuous status as an employee since the date of grant of the Option, the Option may be exercised at any time within one (1) year following the date of death (or such other period of time as is determined by the Committee), by the Eligible Employee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent that Eligible Employee was entitled to exercise the Option on the date of death. To the extent that decedent was not entitled to exercise the Option on the date of death, or if the Eligible Employee's estate, or person who acquired the right to exercise the Option by bequest or inheritance, does not exercise such Option (which he was entitled to exercise) within the time specified herein, the Option shall terminate.

6.6 *Payment of Exercise Price.* The exercise price of an Option shall be paid in the form of one of more of the following, as the Committee shall specify, either through the terms of the Option Document or at the time of exercise of an Option: (a) cash or certified or cashiers' check, (b) payment under an arrangement with a broker selected or approved by the Company where payment is made pursuant to an irrevocable commitment by the broker to deliver to the Company proceeds from the sale of the Shares issuable upon exercise of the Option, or (c) a combination of (a) and (b).

6.7 *No Deferral Feature.* No Option shall have any feature that would allow for the deferral of compensation (within the meaning of Internal Revenue Code Section 409A) other than the deferral of recognition of income until the later of the exercise or disposition of the Option or the time the shares of Stock acquired subject to the exercise of the Option first become substantially vested (as defined in Treasury Regulation section 1.83-3(b)).

6.8 *No Option Repricing.* Without the approval of stockholders, the Company shall not reprice any Options. For purposes of this Plan, the term "reprice" shall mean lowering the exercise price of previously awarded Options within the meaning of Item 402(i) under Securities and Exchange Commission Regulation S-K (including canceling previously awarded Options and regranting them with a lower exercise price).

Section 7. Restricted Stock Awards

The Committee is authorized to make Awards of Restricted Stock to Eligible Employees in such amounts and subject to such terms and conditions as may be determined by the Committee. All Awards of Restricted Stock shall be evidenced by a Restricted Stock Award Agreement.

7.1 *Issuance and Restrictions.* Restricted Stock shall be subject to such restrictions on transferability and other restrictions as the Committee may impose (including, without limitation, limitations on the right to vote Restricted Stock or the right to receive dividends on the Restricted Stock). These restrictions may lapse separately or in combination of such times, under such circumstances, in such installments, upon the satisfaction of continued employment, standards derived from the Qualifying Performance Criteria, lapse of time, certain acceleration events like death or disability or otherwise, as the Committee determines at the time of the grant of the Award or thereafter.

7.2 *Forfeiture.* Except as otherwise determined by the Committee at the time of the grant of the Award or thereafter, upon termination of employment during the applicable restriction period or upon failure to satisfy a standard derived from the Qualifying Performance Criteria during the applicable restriction period, Restricted Stock that is at that time subject to restrictions shall be forfeited and re-acquired by the Company; provided, however, that the Committee may provide in any Award Agreement that restrictions or forfeiture conditions relating to Restricted Stock will be waived in whole or in part in the event of terminations resulting from specified causes, and the Committee may in other cases waive in whole or in part restrictions or forfeiture conditions relating to Restricted Stock.

7.3 *Certificates for Restricted Stock.* Restricted Stock granted under the Plan may be evidenced in such manner as the Committee shall determine. If certificates representing shares of Restricted Stock are registered in the name of the Eligible Employee, certificates must bear an appropriate legend referring to the terms, conditions, and restrictions applicable to such Restricted Stock.

Section 8. Other Provisions Applicable to Awards

8.1 *Transferability.* Unless the agreement or other document evidencing an Award (or an amendment thereto authorized by the Committee) expressly states that the Award is transferable as provided hereunder and the transferability of such Award complies with Reg. § 1.422-2(a)(2)(v), no Award granted under this Plan, nor any interest in such Award, may be sold, assigned, conveyed, gifted, pledged, hypothecated or otherwise transferred in any manner prior to the vesting or lapse of any and all restrictions applicable thereto.

8.2 *Qualifying Performance Criteria.* For purposes of this Plan, the term “Qualifying Performance Criteria” shall mean any one or more of the following performance criteria, either individually, alternatively or in any combination, applied to either the Company as a whole, to a business unit or subsidiary, or based on comparisons of any of the performance measures relative to other companies, either individually, alternatively or in any combination, and measured either annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, to previous years’ results or to a designated comparison group, in each case as specified by the Committee in the Award: (a) cash flow, (b) earnings per share or increases of same, (c) earnings before interest, taxes and amortization, (d) return on equity, (e) total stockholder return, (f) share price performance, (g) return on capital or investment, (h) return on assets or net assets, (i) revenue, (j) income or net income, (k) operating income or net operating income, (l) operating profit or net operating profit, (m) operating margin or profit margin, (n) return on operating revenue, (o) pre-tax or after-tax profit levels expressed in either absolute dollars, (p) revenues or revenue growth, (q) economic or cash value added, (r) results of customer satisfaction surveys, (s) other measures of performance, quality, safety, productivity or process improvement, (t) market share and (u) overhead or other expense reduction. These factors may have a minimum performance standard, a target performance standard and a maximum performance standard. The Committee shall appropriately adjust any evaluation of performance under a Qualifying Performance Criteria to exclude any of the following events that occurs during a performance period: (i) asset write-downs, (ii) litigation or claim judgments or settlements, (iii) the effect of changes in tax law, accounting principles or other such laws or provisions affecting reported results, (iv) accruals for reorganization and restructuring programs and (v) any extraordinary non-recurring items as described in Accounting Principles Board Opinion No. 30 and/or in management’s discussion and analysis of financial condition and results of operations appearing in the Company’s annual report to stockholders for the applicable year.

8.3 *Dividends.* Unless otherwise provided by the Committee, no adjustment shall be made in Shares issuable under Awards on account of cash dividends that may be paid or other rights that may be issued to the holders of Shares prior to their issuance under any Award. The Committee shall specify whether dividends or dividend equivalent amounts shall be paid to any Eligible Employee with respect to the Shares subject to any Award that have not vested or been issued or that are subject to any restrictions or conditions on the record date for dividends.

8.4 *Documents Evidencing Awards.* The Committee shall, subject to applicable law, determine the date an Award is deemed to be granted, which for purposes of this Plan shall not be affected by the fact that an Award is contingent on subsequent stockholder approval of this Plan. The Committee or, except to the extent prohibited under applicable law, its delegate(s) may establish the terms of agreements or other documents evidencing Awards under this Plan and may, but need not, require as a condition to any such agreement's or document's effectiveness that such agreement or document be executed by the Eligible Employee and that such Eligible Employee agrees to such further terms and conditions as specified in such agreement or document. The grant of an Award under this Plan shall not confer any rights upon the Eligible Employee holding such Award other than such terms, and subject to such conditions, as are specified in this Plan as being applicable to such type of Award (or to all Awards) or as are expressly set forth in the agreement or other document evidencing such Award.

8.5 *Financing.* Unless prohibited by federal and state law, or the rules or regulations thereunder, the Committee may in its discretion provide financing to an Eligible Employee in a principal amount sufficient to pay the purchase price of any Award and/or to pay the amount of taxes required by law to be withheld with respect to any Award. Any such loan shall be subject to all applicable legal requirements and restrictions pertinent thereto, including Regulation U promulgated by the Federal Reserve Board. The grant of an Award shall in no way obligate the Company or the Committee to provide any financing whatsoever in connection therewith.

8.6 *Compliance with Code Section 409A.* Notwithstanding any language to the contrary in this Plan, the Committee will ensure that the terms and conditions of any Awards issued will comply with the applicable provision of Code Section 409A or the regulations or other pronouncements thereunder.

8.7 *Additional Restrictions on Awards.* Either at the time an Award is granted or by subsequent action, the Committee may, but need not, impose such restrictions, conditions or limitations as it determines appropriate as to the timing and manner of any resales by an Eligible Employee or other subsequent transfers by an Eligible Employee of any Shares issued under an Award, including without limitation (a) restrictions under an insider trading policy, (b) restrictions designed to delay and/or coordinate the timing and manner of sales by Eligible Employees, and (c) restrictions as to the use of a specified brokerage firm for such resales or other transfers.

Section 9. Changes in Capital Structure

9.1 *Corporate Actions Unimpaired.* The existence of outstanding Awards shall not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations, exchanges, or other changes in the Company's capital structure or its business, or any merger or consolidation of the Company, or any issuance of Shares or other securities or subscription rights thereto, or any issuance of bonds, debentures, preferred or prior preference stock ahead of or affecting the Shares or other securities of the Company or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise. Further, except as expressly provided herein or by the Committee, (a) the issuance by the Company of shares of stock of any class of securities convertible into shares of stock of any class, for cash, property, labor or services, upon direct sale, upon the exercise of rights or warrants to subscribe therefor, or upon conversion of shares or obligations of the Company convertible into such shares or other securities, (b) the payment of a dividend in property other than Shares, or (c) the occurrence of any similar transaction, and in any case whether or not for fair value, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number of Shares subject to Awards theretofore granted or the purchase price per Share, unless the Committee shall determine in its sole discretion that an adjustment is necessary to provide equitable treatment to an Eligible Employee.

9.2 *Adjustments Upon Certain Events.* If the outstanding Shares or other securities of the Company, or both, for which the Award is to be settled shall at any time be changed or exchanged by declaration of a stock dividend, stock split, combination of shares, recapitalization, or reorganization, the Committee may appropriately and equitably adjust the number and kind of Shares or other securities which are subject to the Plan or subject to any Awards theretofore granted, and the exercise or settlement prices of such Awards, so as to maintain the proportionate number of Shares or other securities without changing the aggregate exercise or settlement price, provided, however, that such adjustment shall be made so as not to affect the status of any Award intended to qualify as an ISO or as "performance based compensation" under Section 162(m) of the Code.

Section 10. Mergers and Liquidation

Except as limited by the provisions of Code Section 422 of the Code and the terms of any individual Award, if the company is the surviving corporation in any merger or consolidation, all Awards shall remain in force, and any: (1) Option granted under the Plan shall remain outstanding pursuant to the terms of the Plan and the Award; and (2) Restricted Stock granted under the Plan shall continue to be outstanding pursuant to the terms of the Award and this Plan. Except to the extent otherwise provided in an Award document, by the Board, or as limited by Code Section 422, dissolution or liquidation of the Company shall cause every unvested Option, Restricted Stock or other Award for which there remains contingencies, conditions and unmet performance standards to terminate. Except as limited by Code Section 422, a merger or consolidation in which the Company is not the surviving corporation shall also cause every unvested Option or Restricted Stock for which there remains contingencies, conditions and unmet performance standards to terminate unless specifically provided otherwise in an Award document or by the Board.

Section 11. Taxes

11.1 *Withholding Requirements.* The Committee may make such provisions or impose such conditions as it may deem appropriate for the withholding or payment by an Eligible Employee of any taxes that the Committee determines are required in connection with any Award granted under this Plan, and an Eligible Employee's rights in any Award are subject to satisfaction of such conditions.

11.2 *Payment of Withholding Taxes.* Notwithstanding the terms of Section 11.1, the Committee may provide in the agreement or other document evidencing an Award or otherwise that all or any portion of the taxes required to be withheld by the Company or, if permitted by the Committee, desired to be paid by the Eligible Employee, in connection with the exercise, vesting, settlement or transfer of any Award shall be paid or, at the election of the Eligible Employee, may be paid by the Company by withholding shares of the Company's capital stock otherwise issuable or subject to such Award, or by the Eligible Employee delivering previously owned shares of the Company's capital stock, in each case having a fair market value equal to the amount required or elected to be withheld or paid, or by a broker selected or approved by the Company paying such amount pursuant to an irrevocable commitment by the broker to deliver to the Company proceeds from the sale of the Shares issuable under the Award. Any such election is subject to such conditions or procedures as may be established by the Committee and may be subject to approval by the Committee.

Section 12. Amendments or Termination

The Board may amend, alter or discontinue this Plan or any agreement or other document evidencing an Award made under this Plan but, except as provided pursuant to the anti-dilution adjustment provisions of Section 9.2, no such amendment shall, without the approval of the stockholders of the Company:

- (a) change the maximum number of shares of Common Stock for which Awards may be granted under this Plan;
- (b) extend the term of this Plan; or
- (c) change the class of persons eligible to be Eligible Employees.

The Board may amend, alter or discontinue the Plan or any agreement evidencing an Award made under the Plan, but no amendment or alteration shall be made which would impair the rights of any Award holder, without such holder's consent, under any Award theretofore granted; provided that no such consent shall be required if the Committee determines in its sole discretion and prior to the date of any change in control, recapitalization, stock dividend, stock split, reorganization, merger, consolidation or similar type transaction that such amendment or alteration either is required or advisable in order for the Company, the Plan, or any Award granted, to satisfy any law or regulation or to meet the requirements of any accounting standard.

Section 13. Compliance with Other Laws and Regulations

This Plan, the grant and exercise of Awards thereunder, and the obligation of the Company to sell, issue or deliver Shares under such Awards, shall be subject to all applicable federal, state and foreign laws, rules and regulations and to such approvals by any governmental or regulatory agency as may be required. The Company shall not be required to register in an Eligible Employee's name or deliver any Shares prior to the completion of any registration or qualification of such Shares under any federal, state or foreign law or any ruling or regulation of any government body which the Committee shall determine to be necessary or advisable. This Plan is intended to constitute an unfunded arrangement for the Eligible Employees.

Unless the Awards and Shares covered by this Plan have been registered under the Securities Act of 1933, as amended, or the Company has determined that such registration is unnecessary, each person receiving an Award and/or Shares pursuant to any Award may be required by the Company to give a representation in writing that such person is acquiring such Shares for his or her own account for investment and not with a view to, or for sale in connection with, the distribution of any part thereof.

Section 14. No Right to Company Employment

Nothing in this Plan or as a result of any Award granted pursuant to this Plan shall confer on any individual any right to continue in the employ of the Company or interfere in any way with the right of the Company to terminate an individual's employment at any time. The agreements or other documents evidencing Awards may contain such provisions as the Committee may approve with reference to the effect of approved leaves of absence.

Section 15. Liability of Company

The Company and any Affiliate which is in existence or hereafter comes into existence shall not be liable to an Eligible Employee or other persons as to:

(a) The Non-Issuance of Shares. The non-issuance or sale of shares as to which the Company has been unable to obtain from any regulatory body having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any shares hereunder; and

(b) Tax Consequences. Any tax consequence expected, but not realized, by any Eligible Employee or other person due to the receipt, exercise or settlement of any Award granted hereunder.

Section 16. Effectiveness and Expiration of Plan

This Plan shall be effective on the date the Company's Board of Directors adopts this Plan, and no ISOs shall be granted prior to such date. All Awards granted under this Plan are subject to, and may not be exercised before the approval of this Plan by the stockholders. If such approval by the stockholders of the Company is not forthcoming, all Awards previously granted under this Plan shall be void. No Awards shall be granted pursuant to this Plan after March 11, 2020.

Section 17. Incentive Stock Options

Notwithstanding anything in the Plan to the contrary, it is the intention of the Company and the Committee that all terms and provisions relating to ISOs of this Plan shall be consistent with the requirements of Code Section 422 and the applicable regulations thereunder, as of the effective date of this plan, and to the extent any term or provision of this Plan relating to ISOs is inconsistent with Code Section 422 and the applicable regulations thereunder at that date, the term or provision shall be read, interpreted or substituted so as to be consistent with the applicable provision of Code Section 422 or the regulations thereunder.

Section 18. Non-Exclusivity of Plan

Neither the adoption of this Plan by the Board nor the submission of this Plan to the stockholders of the Company for approval shall be construed as creating any limitations on the power of the Board or the Committee to adopt such other incentive arrangements as either may deem desirable, including without limitation, the granting of restricted stock or stock options otherwise than under this Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

Section 19. Governing Law

This Plan and any agreements or other documents hereunder shall be interpreted and construed in accordance with the laws of the State of Arizona and applicable federal law. The Committee may provide that any dispute as to any Award shall be presented and determined in such forum as the Committee may specify, including through binding arbitration. Any reference in this Plan or in the agreement or other document evidencing any Award to a provision of law or to a rule or regulation shall be deemed to include any successor law, rule or regulation of similar effect or applicability.

Section 20. Miscellaneous Matters

20.1 *Annulment of Awards.* The grant of any Award payable in Shares is provisional until the Eligible Employee becomes entitled to the certificates in settlement thereof. In the event the employment of an Eligible Employee is terminated for cause (as defined below), any Award which is provisional shall be annulled as of the date of such termination for cause. For the purpose of this Section 20.1, the term “terminated for cause” means any discharge for violation of the policies and procedures of the Company or any Subsidiary or for other job performance or conduct which is detrimental to the best interests of the Company or a Subsidiary.

20.2 *Securities Law Restrictions.* No Shares shall be issued under the Plan unless counsel for the Company shall be satisfied that such issuance will be in compliance with applicable Federal and state securities laws. Certificates for Shares delivered under the Plan may be subject to such stock-transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which the Shares is then listed, and any applicable Federal or state securities law. The Committee may cause a legend or legends to be put on any such certificates to refer to those restrictions. Further, without limiting the foregoing, each person exercising an Option or receiving Restricted Stock may be required by the Company to give a representation in writing that he or she is acquiring Shares for his or her own account for investment and not with a view to, or for sale in connection with, the distribution of any part thereof (regardless of whether such option and Shares covered by the Plan are registered under the Securities Act of 1933, as amended). As a condition of transfer of the certificate evidencing Shares, the Committee may obtain such other agreements or undertakings, if any, that it may deem necessary or appropriate to assume compliance with any provisions of the Plan or any law or regulation. Certificates for Shares delivered under the Plan may be subject to such stock transfer orders and other restrictions as the Board may deem advisable under the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which the Shares are then listed, and any applicable Federal or state securities laws. The Board may cause a legend or legends to be put on any such certificate to refer to those restrictions.

20.3 *Award Agreement.* Each Eligible Employee receiving an Award under the Plan shall enter into an Award Agreement (“Award Agreement”) with the Company in a form specified by the Committee agreeing to the terms and conditions of the Award and such related matters as the Committee, in its sole discretion, shall determine.

20.4 *Costs of Plan.* The costs and expenses of administering the Plan shall be borne by the Company.

20.5 *Tax Reimbursement Payments to Eligible Employees.* Unless prohibited by federal and state law, or the rules and regulations thereunder, the Committee, pursuant to the terms of the agreements or other documents pursuant to which specific Awards are made under the Plan, may agree to reimburse Eligible Employees for some or all of the federal, state and local income taxes associated with the grant or exercise of an Award or the receipt of the cash or Shares from an Award (including any additional tax imposed due to Code Section 409A), or the 20% excise tax on any “excess parachute payments” under Code Sections 280G and Code Section 4999, and may agree to reimburse such Eligible Employees for some or all the additional federal, state and local income tax associated with the payments made under this Section 20.5.

20.6 *Government Regulations.* The Plan and the granting and exercise of Options and Shares hereunder, and the obligations of the Company to sell and deliver Shares under Options, shall be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

20.7 *Interpretation.* If any provision of the Plan is held invalid for any reason, such holding shall not affect the remaining provisions of the Plan, but instead the Plan shall be construed and enforced as if such provisions had never been included in the Plan. Headings contained in the Plan are for convenience only and shall in no manner be construed as part of this Plan. Any reference to the masculine, feminine or neuter gender shall be a reference to such other gender as is appropriate.

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

AMENDED AND RESTATED EMPLOYMENT AGREEMENT, dated this ____ day of _____, 2010 (the "Agreement"), between Amtech Systems, Inc., an Arizona corporation (the "Company") with offices at 131 South Clark Drive, Tempe, Arizona, and Jong S. Whang (the "Executive"),

WITNESSETH

WHEREAS, the Company and the Executive previously entered into an Employment Agreement dated April 13, 2007; and

WHEREAS, such Employment Agreement was amended by the Amendment to Employment Agreement, dated March 10, 2008, and the 409A Amendment to Employment Agreement, dated December 31, 2008 (collectively, the "Amendments"); and

WHEREAS, the Initial Term of such Employment Agreement expires on April 13, 2010; and

WHEREAS, the Company and the Executive wish to extend the Executive's employment on terms and conditions generally consistent with the Employment Agreement and the Amendments, and as otherwise provided herein;

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

1. Employment. Subject to the terms and conditions of this Agreement, the Company agrees to employ the Executive as its Chief Executive Officer during the Employment Period (as defined in Section 7) and Executive agrees to perform such acts and duties and furnish such services to the Company and its affiliates consistent with such position as the Company's Board of Directors shall from time to time direct. The Executive shall have general and active charge of the business and affairs of the Company and, in such capacity, shall have responsibility for the day-to-day operations of the Company, subject to the authority and control of the Board of Directors of the Company. During the Employment Period, the Company shall continue to take such actions as necessary to cause the Executive's nomination as a member of the Board of Directors of the Company. The Executive hereby accepts such employment and agrees to devote his full time and best efforts to the duties provided herein, provided, that the Executive may engage in other business activities which (i) involve no conflict of interest with the interests of the Company (subject to approval by the Board of Directors, which approval shall not be unreasonably withheld) and (ii) do not materially interfere with the performance by the Executive of his duties under this Agreement.

2. Compensation. For services rendered to the Company during the term of this Agreement, the Company shall compensate the Executive with an initial base salary, payable in monthly installments, of \$350,000 per annum. Such base salary shall be reviewed on an annual basis by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee") and shall be subject to being increased but not decreased in the discretion of the Compensation Committee.

3. Incentive Compensation. The Executive shall also be entitled to annual cash bonuses for each fiscal year during the Employment Period (“Incentive Compensation”). The Executive’s Incentive Compensation for each such fiscal year shall be determined in accordance with an annual bonus plan adopted by the Compensation Committee, which shall be no less favorable to the Executive than the bonus plan for fiscal 2010 adopted by the Compensation Committee on December 21, 2009. Any bonus due to Executive will be paid within 75 days after the end of the Company’s fiscal year.

4. Stock Options.

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

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

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

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

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

8. Termination.

(a) Executive's employment with the company shall be "at will". Either the Company or the Executive may terminate this Agreement and Executive's employment at any time, with or without Cause or Good Reason (as such terms are defined below), in its or his sole discretion, upon thirty (30) days prior written notice of termination.

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

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

(d) "Termination Date" shall mean any of the following and which termination is a "separation of service" within the meaning of Section 409A of the Code: (i) if this Agreement is terminated on account of death, the date of death; (ii) if this Agreement is terminated for Disability, the date established by the Company pursuant to Section 8(c) hereof; (iii) if this Agreement is terminated by the Company, the date on which a notice of termination is given to the Executive; (iv) if the Agreement is terminated by the Executive, the date the Executive ceases work; or (v) if this Agreement expires by its terms, the last day of the term of this Agreement. Notwithstanding the foregoing, if within thirty (30) days after any notice of termination is given, the party receiving such notice notifies the other party that a dispute exists concerning the termination, the Termination Date shall be the date finally determined to be the Termination Date, either by mutual written agreement of the parties or by binding arbitration in the manner provided in Section 23 hereof; provided that the Termination Date shall be extended by a notice of dispute only if such notice is given in good faith and the party giving such notice pursues the resolution of such dispute with reasonable diligence. Notwithstanding the pendency of any such dispute, the Company will continue to pay the Executive his full compensation in effect when the notice giving rise to the dispute was given and continue the Executive as a participant in all compensation, benefit and insurance plans in which he was participating when the notice giving rise to the dispute was given, until the dispute is finally resolved. Amounts paid under this Section 8(d) shall be in addition to all other amounts due under this Agreement and shall not be offset against or reduce any amounts due under this Agreement; provided, however, that if the arbitrator determines that any notice of dispute by the Executive was not given in good faith or that the Executive did not pursue the resolution of such dispute with reasonable diligence, the Executive shall repay the Company the amount of compensation paid to the Executive pursuant to Section 8(d) from the Termination Date which would have applied had such notice of dispute not been given, plus interest thereon at the applicable federal rate provided for in Section 1274(d) of the Code, or any successor provision thereof, for an obligation with a term equal to the period from the date of payment to the date of repayment pursuant to this Section 8(d).

9. Severance:

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

(i) a cash lump sum in an amount equal to the greater of the Executive's base salary for the remainder of the Initial Term or two years of Executive's base salary in effect on the Termination Date;

(ii) a cash lump sum equal to the maximum amount of the Incentive Compensation which Executive could earn for the fiscal year in which the Termination Date occurs (the "Maximum Incentive Compensation"); and

(iii) full vesting of all outstanding stock options and restricted stock held by Executive.

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

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

Notwithstanding the foregoing, the Company shall not be required to pay any severance pay or consulting payments for any period following the Termination Date if the Executive violates the provisions of Section 15, Section 16 or Section 17 of this Agreement in any material respect, and fails to cure such violation within thirty (30) days after written notice from the Company to the Executive detailing such violation.

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

(c) In addition to the provisions of Section 9(a) and 9(b) hereof, to the extent COBRA shall be applicable to the Company or as provided by law, the Executive shall be entitled to continuation of group health plan benefits in accordance with COBRA if the Executive makes the appropriate conversion and payments. If requested to do so, the Company will transfer ownership of the life insurance policy referred to in Section 5 to the Executive and the Executive agrees to pay for any costs related to the transfer in excess of \$1000 and to be responsible for all future premiums.

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

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

(f) Notwithstanding anything contained in this Agreement to the contrary, if at the time of the Executive's "separation from service" (as defined in Section 409A of the Code) the Executive is a "specified employee" (within the meaning of Section 409A and the Company's specified employee identification policy) and if any payment, reimbursement and/or in-kind benefit that constitutes nonqualified deferred compensation (within the meaning of Section 409A) is deemed to be triggered by the Executive's separation from service, then, to the extent one or more exceptions to Section 409A are inapplicable (including, without limitation, the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) relating to separation pay due to an involuntary separation from service and its requirement that installments must be paid no later than the last day of the second taxable year following the taxable year in which such an employee incurs the involuntary separation from service), all payments, reimbursements, and in-kind benefits that constitute nonqualified deferred compensation (within the meaning of Section 409A) to the Executive shall not be paid or provided to the Executive during the six-month period following the Executive's separation from service, and (i) such postponed payment and/or reimbursement/in-kind amounts shall be paid to the Executive in a lump sum within thirty (30) days after the date that is six (6) months following the Executive's separation from service; (ii) any amounts payable to the Executive after the expiration of such six- (6-) month period shall continue to be paid to the Executive in accordance with the terms of this Agreement; and (iii) to the extent that any group hospitalization plan, health care plan, dental care plan, life or other insurance or death benefit plan, and any other present or future similar group executive benefit plan or program or any lump sum cash out thereof is nonqualified deferred compensation (within the meaning of Section 409A), the Executive shall pay for such benefits from his Termination Date until the first day of the seventh month following the month of the Executive's separation from service, at which time the Company shall reimburse the Executive for such payments. If the Executive dies during such six- (6-) month period and prior to the payment of such postponed amounts of nonqualified deferred compensation, only the amount of nonqualified deferred compensation equal to the number of whole months that the Executive lived shall be paid in a lump sum to the Executive's estate or, if applicable, to the Executive's designated beneficiary within thirty (30) days after the date of the Executive's death.

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

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

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

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

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

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

15. Noncompetition.

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

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

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

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

16. Assignment of Patents. Executive shall disclose fully to the Company any and all discoveries and any and all ideas, concepts or inventions relating to the Company's business as described in the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission) which he shall conceive or make during his period of employment, or during the period of six months after his employment shall terminate, which are in whole or in part the result of his work with the Company. Such disclosure is to be made promptly after each such discovery or conception, and each such discovery, idea, concept or invention will become and remain the property of the Company, whether or not patent applications are filed thereon. Upon request and at the expense of the Company, the Executive shall make application through the patent solicitors of the Company for letters patent of the United States and any and all other countries at the discretion of the Company on such discoveries, ideas and inventions, and to assign all such applications to the Company, or at its order, forthwith, without additional payment by the Company during his period of employment and for reasonable compensation for time actually spent by the Executive at such work at the request of the Company after the termination of the employment. Executive shall give the Company, its attorneys and solicitors, all reasonable assistance in preparing and prosecuting such applications and, on request of the Company, execute all papers and do all things that may be reasonably necessary to protect the right of the Company and vest in it or its assigns the discoveries, ideas or inventions, applications and letters patent herein contemplated. Said cooperation shall also include all actions reasonably necessary to aid the Company in the defense of its rights in the event of litigation.

17. Trade Secrets.

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

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

18. Provisions After Change of Control.

(a) In the event Executive's employment with the Company is terminated (other than as a consequence of death or Disability) either (x) by the Company for any reason other than for Cause during a Pending Change of Control (as hereinafter defined) or within one year following the occurrence of a Change of Control, or (y) by Executive for Good Reason within one year following the occurrence of a Change of Control, then Executive shall be entitled to receive from the Company, in lieu of the severance payment otherwise payable pursuant to Section 9(a), the following:

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

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

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

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

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

(iii) Approval by the shareholders of the Company of a reorganization, merger or consolidation (a “Business Combination”), in each case, with respect to which all or substantially all holders of the Outstanding Capital Stock and Voting Securities immediately prior to such Business Combination do not, following such Business Combination, beneficially own, directly or indirectly, more than 60% of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from the Business Combination; or

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

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

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

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

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

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

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

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

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

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

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

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

AMTECH SYSTEMS, INC.

By

Bradley C. Anderson
Vice President and Chief Financial Officer

Jong S. Whang, Executive

**AMENDED AND RESTATED
CHANGE OF CONTROL AND SEVERANCE AGREEMENT**

THIS CHANGE OF CONTROL SEVERANCE AGREEMENT (this "Agreement"), is entered into as of this ____ day of March, 2010, between Amtech Systems, Inc., an Arizona corporation (the "Company"), with offices at 131 South Clark Drive, Tempe, Arizona, and Robert T. Hass (the "Executive").

WITNESSETH

WHEREAS, the Company and the Executive have entered into that certain Key Man Severance Agreement, dated October 1, 1999 and that certain Agreement, dated May 19, 1992;

WHEREAS, the Company and the Executive entered into that certain Amended and Restated Change of Control and Severance Agreement, dated December 29, 2008 in order to amend the Employment Agreement to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the final regulations issued thereunder ("Section 409A");

WHEREAS, the Company and the Executive desire to further amend the Amended and Restated Change of Control and Severance Agreement; and

WHEREAS, the Board of Directors of the Company (the "Board") has approved such amendment.

NOW THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein, and intending to be legally bound hereby, the Company and the Executive do hereby agree as follows:

Definitions.

"Additional Terms" shall have the meaning set forth in Section 5 of this Agreement.

"Board" shall mean the Board of Directors of the Company.

"Business Combination" shall have the meaning set forth in Section 2(b)(iii) of this Agreement.

"Cause" shall mean (i) the Executive's willful, repeated or negligent failure to perform his duties to the Company and to comply with any reasonable or proper direction given by or on behalf of the Company's Board of Directors and the continuation of such failure following twenty (20) days written notice to such effect, (ii) the Executive being guilty of serious misconduct on the Company's premises or elsewhere, whether during the performance of his duties or not, which is reasonably likely to cause material damage to the reputation of the Company or render it materially more difficult for the Executive to satisfactorily continue to perform his duties and the continuation or a second instance of such serious misconduct following twenty (20) days written notice to such effect; (iii) the Executive being found guilty in a criminal court of any offense of a nature which is reasonably likely to materially adversely affect the reputation of the Company or to materially prejudice its interests if the Executive were to continue to be employed by the Company; (iv) the Executive's commission of any act of fraud or theft involving the Company or its business, or any intentional tort against the Company; or (v) the Executive's violation of any of the material terms, covenants, representations or warranties contained in this Agreement and failure to correct such violation within twenty (20) days after written notice by the Company. Notwithstanding the foregoing, "Cause" shall only be deemed to exist if it is so determined by a resolution duly adopted by the Board of Directors of the Company, at a duly noticed meeting at which the Executive and his counsel are first given the opportunity to address the Board with respect to such determination.

“Change of Control” shall have the meaning set forth in Section 2(b) of this Agreement.

“Company” shall have the meaning set forth in the preamble to this Agreement.

“Disability” shall mean that the Executive, in the good faith determination of the Board of Directors of the Company, based on the advice of a qualified physician after a proper examination of the Executive, is unable to render services of the character necessary to perform his duties to the Company and that such inability (i) may be expected to be permanent, or (ii) may be expected to continue for a period of at least six (6) consecutive months (or for shorter periods totaling more than six (6) months during any period of twelve (12) consecutive months). Termination resulting from Disability may only be effected after at least thirty (30) days written notice by the Company of its intention to terminate the Executive’s employment.

“Effective Date” shall mean the date of this Agreement.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended.

“Executive” shall have the meaning set forth in the preamble to this Agreement.

“Good Reason” shall mean (i) the Company’s failure to elect or reelect, or to appoint or reappoint, the Executive to the offices of Chief Accounting Officer of the Company; (ii) material changes by the Company in the Executive’s function, duties or responsibilities (including reporting responsibilities) of a scope less than that associated with the positions of Chief Accounting Officer of the Company; (iii) Executive’s base salary is reduced by the Company below the highest base salary of Executive in effect during the term of his Employment; (iv) relocation of Executive’s principal place of employment to a place that is not within a radius of twenty-five (25) miles of his primary residence; (v) failure by the Company to obtain the assumption of this Agreement by any successor or assign of the Company; or (vi) material breach of this Agreement by the Company, which breach is not cured within five (5) days after written notice thereof is delivered to the Company.

“Incentive Compensation” shall mean any annual cash bonuses, as determined in accordance with any annual bonus plan adopted by the Company’s Compensation Committee, to which the Executive is entitled for each fiscal year during his term of employment.

“Incumbent Board” shall have the meaning set forth in Section 2(b)(ii) of this Agreement.

“Initial Term” shall have the meaning set forth in Section 5 of this Agreement.

“Outstanding Capital Stock” shall have the meaning set forth in Section 2(b)(i) of this Agreement.

“Pending Change of Control” shall have the meaning set forth in Section 2(c) of this Agreement.

“Person” shall have the meaning set forth in Section 2(b)(i) of this Agreement.

“Term” shall have the meaning set forth in Section 5 of this Agreement.

“Termination Date” means the date the Executive ceases work, which cessation of work is a “separation from service” within the meaning of Section 409A.

“Voting Securities” shall have the meaning set forth in Section 2(b)(i) of this Agreement.

Severance Provisions After Change of Control.

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

- i) a cash lump sum equal to an amount equal to one (1) year of Executive’s base salary in effect on the Termination Date;
- ii) a cash lump sum equal to the amount of accrued but unpaid Incentive Compensation earned by the Executive, which amount shall be prorated for the year in which the termination occurs and shall be calculated through the end of the last full month prior to the Termination Date with a proportionate adjustment to all caps and floors, if any, based upon the portion of the fiscal year worked prior to the termination of Executive’s employment; and
- iii) full vesting of all outstanding stock options and restricted stock grants held by Executive.

The Company shall make termination payments required by Section 2(a)(i) within ten (10) days of the Termination Date, and payments required by Section 2(a)(ii) within thirty (30) days of the Termination Date; provided, however, if such ten (10) day or thirty (30) day period begins in one calendar year and ends in another, Executive will not have the right to specify the calendar year of payment. All payments to be made to the Executive upon a termination of employment may only be made upon a “separation from service” (within the meaning of Section 409A) of the Executive. For purposes of Section 409A, (i) each payment made under this Agreement shall be treated as a separate payment; (ii) the Executive may not, directly or indirectly, designate the calendar year of payment; and (iii) no acceleration of the time and form of payment of any nonqualified deferred compensation to the Executive or any portion thereof, shall be permitted.

For purposes of this Agreement, the term “Change of Control” shall mean:

The acquisition, other than from the Company, by any individual, entity or group (within the meaning of Rule 13d-3 promulgated under the Exchange Act or any successor provision) (any of the foregoing described in this Section 2(b)(i) hereafter a “Person”) of 20% or more of either (a) the then outstanding shares of Capital Stock of the Company (the “Outstanding Capital Stock”) or (b) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the “Voting Securities”); provided, however, that any acquisition by (x) the Company or any of its subsidiaries, or any employee benefit plan (or related trust) sponsored or maintained by the Company or any of its subsidiaries or (y) any Person that is eligible, pursuant to Rule 13d-1 (b) under the Exchange Act, to file a statement on Schedule 13G with respect to its beneficial ownership of Voting Securities, whether or not such Person shall have filed a statement on Schedule 13G, unless such Person shall have filed a statement on Schedule 13D with respect to beneficial ownership of 35% or more of the Voting Securities or (z) any corporation with respect to which, following such acquisition, more than 60% respectively, of the then outstanding shares of common stock of such corporation and the combined voting power of the then outstanding voting securities of such corporation entitled to vote generally in the election of directors is then beneficially owned, directly or indirectly, by all or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Capital Stock and Voting Securities immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the Outstanding Capital Stock and Voting Securities, as the case may be, shall not constitute a Change of Control; or

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

Approval by the shareholders of the Company of a reorganization, merger or consolidation (a “Business Combination”), in each case, with respect to which all or substantially all holders of the Outstanding Capital Stock and Voting Securities immediately prior to such Business Combination do not, following such Business Combination, beneficially own, directly or indirectly, more than 60% of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from the Business Combination; or

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

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

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

Should the Executive be terminated for any other reason than that described in Section 2(a), the Executive shall be entitled to severance pay, the amount of which shall be determined by the Compensation Committee of the Board of Directors taking into consideration the Executive's contributions to the Company's success and growth and the Executive's length of service; provided, however, that if the Executive is terminated for cause there shall be no severance payment.

Specified Employee. Notwithstanding anything in this Agreement to the contrary, if at the time of the Executive's "separation from service" (as defined in Section 409A) the Executive is a "specified employee" (within the meaning of Section 409A and the Company's specified employee identification policy) and if any payment, reimbursement and/or in-kind benefit that constitutes nonqualified deferred compensation (within the meaning of Section 409A) is deemed to be triggered by the Executive's separation from service, then, to the extent one or more exceptions to Section 409A are inapplicable (including, without limitation, the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) relating to separation pay due to an involuntary separation from service and its requirement that installments must be paid no later than the last day of the second taxable year following the taxable year in which such an employee incurs the involuntary separation from service), all payments, reimbursements, and in-kind benefits that constitute nonqualified deferred compensation (within the meaning of Section 409A) to the Executive shall not be paid or provided to the Executive during the six-month period following the Executive's separation from service, and (i) such postponed payment and/or reimbursement/in-kind amounts shall be paid to the Executive in a lump sum within thirty (30) days after the date that is six (6) months following the Executive's separation from service; and (ii) any amounts payable to the Executive after the expiration of such six- (6-) month period shall continue to be paid to the Executive in accordance with the terms of this Agreement.

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

Term. The term of this Agreement (the "Term") shall commence on the Effective Date and shall continue for an initial term of three (3) years (the "Initial Term"). Thereafter, the Term shall continue for successive one (1) year terms (the "Additional Terms") unless either the Company or the Executive provides written notice of termination of this Agreement not less than one hundred twenty (120) days prior to the end of the Initial Term or any Additional Term, or unless earlier terminated by the mutual written consent of the Company and the Executive.

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

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

Binding Effect; Assignment. The rights and obligations of this Agreement shall bind and inure to the benefit of any successor of the Company by reorganization, merger or consolidation, or any assignee of all or substantially all of the Company's business or properties. The Executive's rights hereunder are personal to and shall not be transferable or assignable by the Executive.

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

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

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

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

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

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

COMPANY:

EXECUTIVE:

AMTECH SYSTEMS, INC.

By

Name:

Title:

Robert T. Hass

**Amtech Promotes Fokko Pentinga to President of Amtech Systems, Inc. -
JS Whang to Continue as CEO and Chairman of the Board**
Strengthening Management for Future Growth

TEMPE, Arizona – March 16, 2010 – Amtech Systems, Inc. (NASDAQ: ASYS), a global supplier of production and automation systems and related supplies for the manufacture of solar cells, semiconductors, and silicon wafers, today announced that Fokko Pentinga, Managing Director of Amtech Europe and General Manager of Tempress Systems®, Inc., has been promoted to President of Amtech Systems, Inc. The Company also entered into an amended and restated employment agreement with J.S. Whang, who will continue as Chief Executive Officer and Chairman of the Board of Directors of Amtech Systems, Inc.

J.S. Whang, Chief Executive Officer of Amtech, commented, “This appointment of Fokko Pentinga to President of Amtech is another indication of our substantial growth in recent years and, more importantly, the anticipated growth ahead of us, which calls for a strengthening of our management depth. Fokko was instrumental in securing Tempress’ successful R&D partnership with Yingli Green Energy Holding Co., LTD (NYSE: YGE) and the Energy Research Centre of the Netherlands (ECN), and obtaining the recently announced 300MW order from Yingli. Fokko brings to the President’s office a thorough knowledge of our technologies and products and proven management, sales and marketing skills. I am very pleased and excited to have him join our executive ranks. While Fokko has responsibility for all of Amtech’s subsidiaries in his role as President, his near-term focus will be on executing the operational ramp-up needed at our European operations to support our tremendous backlog of solar orders.”

Mr. Pentinga has over 30 years of experience in the semiconductor and solar industries and has spent the past 15 years as general manager of Amtech’s solar subsidiary, Tempress Systems. In December 2008 Mr. Pentinga was appointed as Managing Director of Amtech Europe, which is comprised of Tempress Systems in Vaassen, the Netherlands, and R2D Automation® in Montpellier, France. Amtech’s other subsidiaries include Bruce Technologies®, Inc. in Billerica, Massachusetts, and P.R. Hoffman® Machine Products, Inc. in Carlisle, Pennsylvania.

About Amtech Systems, Inc.

Amtech Systems, Inc. manufactures capital equipment, including silicon wafer handling automation, thermal processing equipment, and related consumables used in fabricating solar cells and semiconductor devices. Semiconductors, or semiconductor chips, are fabricated on silicon wafer substrates, sliced from ingots, and are part of the circuitry, or electronic components, of many products including solar cells, computers, telecommunications devices, automotive products, consumer goods, and industrial automation and control systems. The Company’s wafer handling, thermal processing and consumable products currently address the diffusion, oxidation, deposition, PECVD, and PSG removal steps used in the fabrication of solar cells, semiconductors, MEMS and the polishing of newly sliced silicon wafers. www.amtechsystems.com

Statements contained in this press release that are not historical facts may be forward looking statements within the meaning of the Private Litigation Reform Act. Such statements may use words such as “proposed,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “predict,” “project” and similar expressions as they relate to Amtech Systems, Inc. or our management. When we make forward-looking statements, we are basing them on our management's beliefs and assumptions, using information currently available to us. Although we believe that the expectations reflected in the forward looking statements are reasonable, these forward-looking statements are subject to risks, uncertainties, and assumptions including the risks discussed in our filings with the Securities and Exchange Commission. If one or more of these risks materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we projected. Any forward looking statements contained in this press release reflect our current views with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. We have no intention, and disclaim any obligation, to update or revise any forward-looking statements, whether as a result of new information, future results or otherwise.

Contacts:

Amtech Systems, Inc
Bradley C. Anderson
Chief Financial Officer
(480) 967-5146

#
