

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13D
(RULE 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO
RULE 13d-2(a)

(Amendment No. 4) (1)

Amtech Systems, Inc.

(Name of Issuer)

Common Stock, \$.01 Par Value

(Title of Class of Securities)

032332-50-4

(CUSIP Number)

STEVEN WOLOSKY, ESQ.
OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP
Park Avenue Tower
65 East 55th Street
New York, New York 10022
(212) 451-2300

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

December 26, 2006

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box / /.

NOTE. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. SEE Rule 13d-7 for other parties to whom copies are to be sent.

(Continued on following pages)

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(1) The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, SEE the NOTES).

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1 NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Richard L. Scott

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) / /
(b) / /

4	SOURCE OF FUNDS*	
	PF	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	/ /
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	USA	
7	SOLE VOTING POWER	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	487,443	
8	SHARED VOTING POWER	
	- 0 -	
9	SOLE DISPOSITIVE POWER	
	487,443	
10	SHARED DISPOSITIVE POWER	
	- 0 -	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	487,443	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	/ /
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	14.0%	
14	TYPE OF REPORTING PERSON*	
	IN	

*SEE INSTRUCTIONS BEFORE FILLING OUT!

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This Amendment No. 4 amends the Schedule 13D filed by Richard L. Scott ("Reporting Person") on May 2, 2005 (the "Schedule 13D"), as amended May 15, 2006, June 27, 2006 and November 27, 2006 with respect to shares of the Common Stock, \$.01 par value ("Common Stock"), of Amtech Systems, Inc., an Arizona corporation (the "Issuer"). Capitalized terms used but not defined herein shall have the respective meanings ascribed to such terms in the Schedule 13D.

The following Items are hereby amended as follows:

Item 3 is hereby amended and restated to read as follows:

Item 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

The Reporting Person has used personal funds of approximately \$2,455,231.40 to acquire the 487,443 shares of Common Stock owned by the Reporting Person (including funds to acquire shares of Series A Preferred which have been converted into Common Stock). The shares were purchased by Amtech Investments, LLC, an entity controlled by the Reporting Person.

Item 4 is hereby amended to add the following:

On December 26, 2006, an affiliate of the Reporting Person delivered a letter to the President and Chief Executive Officer of the Issuer in which it questions the Issuer's intention to raise \$15 million in a public offering of common stock (the "Offering"). The letter states that while exploiting significant opportunities in the solar industry may require additional working capital, it is not in the best interest of the existing stockholders to undertake the Offering, that relative to both comparable companies and intrinsic value, the Offering significantly undervalues the Issuer and that should the

EXHIBIT INDEX

Exhibit -----	Page ----
1. Subscription Agreement dated as of April 22, 2005, between Amtech Investments, LLC and Amtech Systems, Inc.	--
2. Letter from Amtech Investments, LLC to the President and Chief Executive Officer of Amtech Systems, Inc., dated December 26, 2006.	7-8

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Exhibit 2

December 26, 2006

Mr. JS Whang
President, Chief Executive Officer
Amtech Systems, Inc.
131 South Clark Drive
Tempe, AZ 85281

Dear JS:

Richard L. Scott Investments, LLC ("RLSI"), through affiliates, beneficially owns over 14% of the outstanding shares of common stock of Amtech Systems, Inc. (the "Company"). As a former member of the Company's Board of Directors and a supportive shareholder of actions taken by the Company for almost two years, I am compelled to present my perspective regarding the Company's intent to raise \$15MM in a public offering of common stock (the "Offering"). We invested in the Company due to the quality of the Company's management team, the strength of the Company's brands, the competitive positioning the Company enjoys in its industry, the attractive opportunities that we see available to the Company (particularly in the solar industry) and the fact that Amtech's stock trades at what we believe to be a low multiple of both revenues and EBITDA/Cash Flow compared to the intrinsic value of the Company. This remains applicable despite the recent increase in the Company's stock price after reporting your outstanding 4th quarter results and providing positive forward-looking comments on the conference call. As evidenced by your liquid balance sheet, capacity to borrow, and healthy order trends and backlog, the Company is well-positioned to pursue many of the opportunities that are available to it. I understand that exploiting the significant opportunities in the solar industry may require additional working capital, however, it is not in the best interest of the Company or its existing stockholders to undertake this equity offering.

On December 19th, I signed a Non-Disclosure Agreement so that we could discuss the Company's proposed Offering. After speaking with your investment bankers, C.E. Unterberg, Towbin, I communicated to you, Brad Anderson, the Company's CFO, and Larry Firestone, a member of the Company's Board of Directors that the offering was a mistake because (a) you have not demonstrated the need for the new capital based on the strength of your existing balance sheet, (b) you have not shown any projected return on the moneys to be raised that would cause this Offering to not be significantly dilutive to your existing stockholders and (c) I do not believe the Company should be raising capital in the manner it is pursuing. At approximately 4pm on December 21st, just prior to announcing the Company's year-end results, you informed me that despite my objections, the Company had decided to proceed with the Offering and planned to imminently file a Form S-1.

Based upon publicly-available information and my understanding of fees typically paid for investment banking services, it appears that the Company will be issuing new shares equal to approximately 60% of its' existing outstanding common shares at a valuation (as measured by Enterprise Value - taking into account the Company's cash and debt balances) that will likely represent:

- o ~35% my estimate of '07 Revenues

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o ~4.5 times my estimate of '07 EBITDA

Since the Company has minimal capital expenditure requirements, I believe that EBITDA is a reasonable proxy for operating cash flow.

In addition, it is my understanding the Company has over \$6.4MM in cash on its balance sheet and \$3.3MM in bank financing available.

It is my view that relative to both comparable companies and intrinsic value, the Offering significantly undervalues the Company and that should it proceed as planned, significant value will be transferred from existing shareholders, to shareholders participating in the Offering itself. A comparison of the trading activity in ASYS stock after the close of market hours on December 21st with that observed on December 22nd, the morning the proposed Offering was announced, seems to substantiate this view. Shareholders would be better served by waiting to raise capital until such time as the Company has a more defined use of the capital and at such time pursuing the least dilutive means to raise capital including utilizing existing bank and other debt financing alternatives. As such, we respectfully request that you immediately withdraw your S-1 registration and terminate your engagement with C.E. Unterberg, Tobin. While I am not advocating a sale of the Company at this time, as an alternative to the proposed significantly dilutive capital raise, I believe that the Company could be sold to a strategic buyer on terms that will result in appreciably more value for existing shareholders.

As shareholders of Amtech Systems, Inc., we are fortunate to be invested in a company that is performing well, as evidenced by your recent operating results, order trends and backlog. Additionally, it is clear to us that the Company has bright prospects for growth, particularly in the solar industry. We are supportive of reasonable efforts to pursue such opportunities, but disagree with the Company's plans for raising capital without a more defined return on such capital.

If you cannot convince us that the proposed Offering is in all shareholders best interest or fail to withdraw your S-1 registration, our only option will be to call a Special Meeting of Shareholders to seek the votes necessary to change the composition of the Company's Board of Directors in a manner that we believe would more closely protect the interests of existing shareholders. We hope that such actions will be unnecessary and that we can continue to work together in the best interests of the Company's stockholders.

We remain thankful for your hard work and the positive fruits of your efforts. Unfortunately, we believe the proposed Offering is unfair to existing shareholders.

Respectfully,

Robert Averick
Managing Director