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

## **SCHEDULE 13D**

Under the Securities Exchange Act of 1934 (Amendment No. 4)

# AMTECH SYSTEMS, INC.

(Name of Issuer)

Common Stock, \$.01 par value (Title of Class of Securities)

032332-50-4 (CUSIP Number)

David W. Stempel, Esq.
Bradley Arant Boult Cummings LLP
1600 Division Street, Suite 700
Nashville, Tennessee 37203
(615) 252-4632
(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

September 2, 2010 (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  $\Box$ .

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

\* 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 the disclosures provided in a prior cover page.

The information required in 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 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

032332-50-4

SCHEDULE 13D

1	NAMES OF REPORTING PERSONS:  Richard L. Scott IRS Identification Nos. of above persons (entities only):				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  (a)  N/A (b)				
3	SEC USE ONLY				
4	SOURCE OF FUNDS:  PF				
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)  □				
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON		7 8 9 10	SOLE VOTING POWER:  693,881  SHARED VOTING POWER:  -0-  SOLE DISPOSITIVE POWER:  693,881  SHARED DISPOSITIVE POWER:  -0-		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 693,881				
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES:				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 7.7%				
14	TYPE OF REPORTING PERSON: IN				

This Amendment No. 4 amends Amendment No. 3 (filed on September 8, 2010) to the Schedule 13D filed by Richard L. Scott ("Reporting Person") on July 28, 2008, as amended on September 30, 2008 and February 20, 2009 (the "Schedule 13D"), 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 Item is hereby amended as follows:

#### Item 5. Interest in Securities of the Issuer

Amendment No. 3 incorrectly stated that the Reporting Person purchased the following shares of Common Stock of the Issuer in open market transactions during the past 60 days; however, the Reporting Person actually sold the following shares of Common Stock of the Issuer in open market transactions during the past 60 days:

Sale Date	No. of Shares	Price Per Share
9/2/2010	64,000	\$15.3918
9/3/2010	28,000	\$16.3339
9/7/2010	14,700	\$16.7871

The Common Stock was sold by Amtech Investments, LLC, a member managed limited liability company of which Reporting Person is the controlling member.

### Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.