



DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

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

August 7, 2009

Bradley C. Anderson  
Vice President – Finance and Chief Financial Officer  
Amtech Systems, Inc.  
131 South Clark Drive  
Tempe, Arizona 85281

**Re: Amtech Systems, Inc.  
Form 10-K for the fiscal year ended September 30, 2008  
Filed December 10, 2008  
File No. 000-11412**

Dear Mr. Anderson:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Brian Cascio  
Accounting Branch Chief