



February 2, 2017

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549

Attention: Ms. Heather Percival

**Re: Amtech Systems, Inc.
Registration Statement on Form S-3, as amended
Originally filed January 18, 2017 and amended on February 2, 2017
File No. 333-215604**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Securities Act"), Amtech Systems, Inc. (the "Company") hereby requests that the Securities and Exchange Commission (the "Commission") take appropriate action to accelerate the effective date of the above-referenced registration statement, as amended (the "Registration Statement"), and declare the Registration Statement effective under the Securities Act at 4:00 p.m., Washington, D.C. time, on Monday, February 6, 2017, or as soon thereafter as practicable. We also request the Commission specifically confirm such effective date and time in writing to Robert T. Hass (RTHass@amtechsystems.com) and Jaime R. Daddona (jaime.daddona@squirepb.com).

The Company acknowledges that the Company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action, or absence of action by the staff of the Commission.

Thank you for your assistance.

Very truly yours,

Amtech Systems, Inc.

By: /s/ Robert T. Hass
Robert T. Hass
Vice President - Finance and Chief Financial Officer

cc: Jaime R. Daddona, Squire Patton Boggs (US) LLP

