SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-A/A

AMENDMENT NO. 2

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES

PURSUANT TO SECTION 12(b) OR 12(g) OF THE

SECURITIES EXCHANGE ACT OF 1934

ASPEN TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

DELAWARE

(State of incorporation or organization)

04-2739697 (I.R.S. employer identification no.)

TEN CANAL PARK, CAMBRIDGE, MASSACHUSETTS (Address of principal executive offices)

02141 (Zip code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box. []

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box. [X]

Securities Act registration statement file number to which this form relates:

(If applicable)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of Each Class to be so Registered

Name of Each Exchange on Which Each Class is to be Registered

None

None

Securities to be registered pursuant to Section 12(g) of the Act:

Rights to Purchase Series A Participating Cumulative Preferred Stock (Title of Class)

The undersigned registrant hereby amends the following items, exhibits and portions of its registration statement on Form 8-A dated October 9, 1997 for its Rights to Purchase Series A Participating Cumulative Preferred Stock, par value \$.10 par value per share, as set forth in the pages attached hereto.

ITEM 1. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED.

Item 1 of the Form 8-A dated October 9, 1997 (as amended to date, the "Form 8-A") filed by Aspen Technology, Inc. (the "Company"), is hereby further amended to include the following:

On October 26, 2001, the Company amended its Rights Agreement dated March 12, 1998 by entering into Amendment No. 1 to Rights Agreement dated October 26, 2001 between the Company and American Stock Transfer & Trust Company (the Rights Agreement"). Capitalized terms used herein and not otherwise defined shall have the meanings ascribed to them in the Rights Agreement.

The Rights Agreement has been amended as follows:

- 1. to increase the ownership threshold for causing a Distribution Date under the Rights Agreement from beneficial ownership of 15% or more of the outstanding Common Stock of the Company to beneficial ownership of 20% or more of the outstanding Common Stock of the Company;
- 2. to authorize, except as otherwise provided in the Rights Agreement, the Board of Directors of the Company, exclusively, to administer the Rights Agreement;
- 3. to acknowledge that the TIDE Committee of the Board of Directors of the Company shall consider, no less frequently then every three years, whether maintenance of the Rights Agreement continues to be in the interest of the Company; and

4. to reiterate that nothing in the Rights Agreement shall be deemed to be in derogation of the obligation of the Board of Directors of the Company to exercise its fiduciary duty.

A copy of Amendment No. 1 to the Rights Agreement is attached hereto as Exhibit 4.4 and is incorporated herein by reference. The foregoing description of the changes to the Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, as amended.

ITEM 2. EXHIBITS.

Exhibit No. Description

Amendment No. 1 dated as of October 26, 2001 to the Rights Agreement dated as of March 12, 1998 between Aspen Technology, Inc. and American Stock Transfer and Trust Company, as Rights Agent

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: November 8, 2001 ASPEN TECHNOLOGY, INC.

By: /s/ Lawrence B. Evans

Lawrence B. Evans Chairman, Chief Executive Officer and President

RIGHTS AGREEMENT AMENDMENT NO. 1

This Agreement, dated October 26, 2001 is between ASPEN TECHNOLOGY, INC., a Delaware corporation (the "Company"), and AMERICAN STOCK TRANSFER & TRUST COMPANY, as Rights Agent.

Whereas, pursuant to Section 26 of the Rights Agreement (as defined below), the Company may from time to time supplement or amend the Rights Agreement in accordance with its terms; and

Whereas, the Company desires to make certain amendments to the Rights Agreement; and

Whereas, the execution and delivery of this Agreement by the Company and the Rights Agent have been, in all respects, duly authorized by each of them;

Now Therefore, in consideration of the premises and mutual agreements set forth herein, the parties agree as follows:

- 1. RIGHTS AGREEMENT; DEFINITIONS. This Agreement amends the Rights Agreement dated March 12, 1998 between the parties hereto (as in effect prior to giving effect to this Agreement, the "Rights Agreement" and after giving effect to this Agreement, the "Amended Rights Agreement"). Terms defined in the Rights Agreement and not otherwise defined herein shall have the respective meaning ascribed to them therein.
- 2. AMENDMENT OF RIGHTS AGREEMENT. Effective upon the date hereof, the Rights Agreement is amended as follows:
 - 2.1. AMENDMENT OF SECTION 1. CERTAIN DEFINITIONS. The definition of "OWNERSHIP THRESHOLD" is amended to read in its entirety as follows:

"OWNERSHIP THRESHOLD" shall mean, with respect to any Person, Beneficial Ownership of the GREATER of (A) twenty percent (20%) of the Common Shares at any time outstanding or (B) the percentage of the outstanding Common Shares Beneficially Owned by such Person on the date of this Rights Agreement, plus in the case of this clause (B) one percent (1%) of the Common Shares outstanding on such date.

- 2.2. AMENDMENT OF SECTION 28. BENEFITS OF RIGHTS AGREEMENT; DETERMINATIONS AND ACTIONS BY THE BOARD OF DIRECTORS, ETC. SUBSECTION (b) of Section 28 of the Rights Agreement is amended to read in its entirety; a new Subsection (c) of Section 28 is added; and the prior Subsection (c) of Section 28 is hereby re-numbered as Subsection (d) of Section 28; all as follows:
 - "(b) Except as explicitly otherwise provided in this Rights Agreement, the Board of Directors of the Company shall have the exclusive power and authority to administer this Rights Agreement and to exercise all rights and powers specifically granted to the Board of Directors of the Company, or to the Company, or as may be necessary or advisable in the administration of the Rights Agreement, including, without limitation, the right and power to (i) interpret the provisions of this Rights Agreement and (ii) make all determinations deemed necessary or advisable for the administration of this Rights Agreement (including, without limitation, a determination to redeem or not redeem the Rights or to amend this Rights Agreement and a determination of whether there is an Acquiring Person).
 - "(c) It is understood that the TIDE Committee (as described below) of the Board of Directors of the Company shall review and evaluate this Rights Agreement in order to consider whether the maintenance of this Rights Agreement continues to be in the interests of the Company, its stockholders and any other relevant constituencies of the Company, at least every three (3) years, or sooner if any Person shall have made a proposal to the Company, or taken any other action,

that, if effective, could cause such Person to become an Acquiring Person hereunder, if a majority of the members of the TIDE Committee shall deem such review and evaluation appropriate after giving due regard to all relevant circumstances. Following each such review, the TIDE Committee will communicate its conclusions to the full Board of Directors of the Company, including any recommendation in light thereof as to whether this Rights Agreement should be modified or the Rights should be redeemed. The TIDE Committee shall be appointed by the Board of Directors of the Company and shall be comprised of at least three (3) Directors of the Company who are not officers, employees or Affiliates of the Company.

- "(d) Nothing contained in this Rights Agreement shall be deemed to be in derogation of the obligation of the Board of Directors of the Company to exercise its fiduciary duty. Without limiting the foregoing, nothing contained herein shall be construed to suggest or imply that the Board of Directors shall not be entitled to reject any tender offer, or to recommend that holders of Common Shares reject any tender offer, or to take any other action (including, without limitation, the commencement, prosecution, defense or settlement of any litigation and the submission of additional or alternative offers or other proposals) with respect to any tender offer that the Board of Directors believes is necessary or appropriate in the exercise of such fiduciary duty."
- 3. GENERAL. This Agreement and the Amended Rights Agreement referred to herein constitute the entire understanding of the parties with respect to the subject matter hereof and supersede all prior and current understandings and agreements, whether written or oral. This Agreement may be executed in any number of counterparts, which together shall constitute one instrument, and shall bind and inure to the benefit of the parties and their respective successors and assigns. This Agreement shall be governed by and construed in accordance with the laws (other than the conflict of law rules) of the State of Delaware.

ASPEN TECHNOLOGY, INC.

By: /s/ Lawrence B. Evans

Name: Lawrence B. Evans Title: Chief Executive Officer

AMERICAN STOCK TRANSFER & TRUST COMPANY, as Trust Agent

By: /s/ Herbert L. Lemmer

Name: Herbert L. Lemmer Title: Vice President