SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-A/A

AMENDMENT NO. 3

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

04-2739697 -----

(State of incorporation or organization) (I.R.S. employer identification no.)

TEN CANAL PARK, CAMBRIDGE, MASSACHUSETTS 02141 ----------(Address of principal executive offices) (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	Name of Each Exchange on Which
is to be Registered	Each Class is to 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 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 February 6, 2002, the Company amended its Rights Agreement, dated March 12, 1998 and amended October 26, 2001, by entering into Amendment No. 2 to the Rights Agreement dated February 6, 2002 (the "Amendment"), between the Company and American Stock Transfer & Trust Company, as Rights Agent (the "Rights Agreement"). Capitalized terms used herein and not otherwise defined shall have the meanings ascribed to them in the Rights Agreement.

Section 1 of the Rights Agreement has been amended as follows:

- to expand the definition of an "Acquiring Person" to include an "Exempt Person"; and
- to define an "Exempt Person" to mean those investors and their transferees who have purchased or acquired shares of Series B-1 Convertible Preferred Stock, Series B-2 Convertible Preferred Stock or any warrants issued in connection with the Company's private placement of such securities.

A copy of the Amendment is attached hereto as Exhibit 4.5 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

Item 2 of the Form 8-A is hereby amended by adding the following exhibit attached hereto:

EXHIBIT NO. DESCRIPTION

 4.5 Amendment No. 2, dated as of February 6, 2002, 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: February 12, 2002

ASPEN TECHNOLOGY, INC.

By: /s/ Lisa W. Zappala

Lisa W. Zappala Senior Vice President, Finance and Chief Financial Officer

RIGHTS AGREEMENT AMENDMENT NO. 2

THIS AMENDMENT NO.2 TO RIGHTS AGREEMENT is entered into as of February 6, 2002 by Aspen Technology, Inc. (the "Company") and American Stock Transfer and Trust Company, as Rights Agent (the "Rights Agent"), with respect to the Rights Agreement dated as of March 12, 1998 between the Company and the Rights Agreement, as amended to date (the "Rights Agreement").

WHEREAS, no Distribution Date, as defined in Section 3(b) of the Rights Agreement, has occurred; and

WHEREAS, the Company has directed the Rights Agent to enter into this Amendment No. 2 pursuant to Section 26 of the Rights Agreement;

NOW, THEREFORE, in consideration of the premises and mutual agreements set forth herein, the Company and the Rights Agent agree as follows:

1. The definition of "Acquiring Person" set forth in Section 1 of the Rights Agreement is hereby deleted in its entirety and the following is substituted in lieu thereof:

"'Acquiring Person' shall mean any Person who or which, alone or together with all Affiliates and Associates of such Person, shall be the Beneficial Owner of Common Shares then outstanding that equals or exceeds such Person's Ownership Threshold, but shall not include (A) the Company, any Subsidiary of the Company, any employee benefit plan of the Company or of any of its Subsidiaries, or any Person holding Common Shares for or pursuant to the terms of any such employee benefit plan, (B) any such Person who or which has become such a Beneficial Owner solely because (i) of a change in the aggregate number of Common Shares outstanding since the last date on which such Person acquired Beneficial Ownership of any Common Shares or (ii) it acquired such Beneficial Ownership in the good faith belief that such acquisition would not cause such Beneficial Ownership to exceed such Person's Ownership Threshold and such Person relied in good faith in computing the percentage of its Beneficial Ownership on publicly filed reports or documents of the Company which are inaccurate or out-of-date, or (C) an Exempt Person. Notwithstanding clause (B) of the immediately preceding sentence, if any Person that is not an Acquiring Person due to such clause (B) does not reduce its percentage of Beneficial Ownership of Common Shares to an amount less than such Person's Ownership Threshold by the Close of Business on the fifth Business Day after notice from the Company (the date of notice being the first day) that such Person's Beneficial Ownership of Common Shares so exceeds such Person's Ownership Threshold, such Person shall, at the end of such five Business Day period, become an Acquiring Person (and such clause (B) shall no longer apply to such Person). For purposes of this definition, the determination whether any Person acted in `good faith' shall be conclusively determined by the Board of Directors of the Company."

2. The following definition shall be added to Section 1 of the Rights Agreement:

"'Exempt Person' shall mean Pine Ridge Financial Inc., Perseverance LLC and Smithfield Fiduciary LLC (each a "Series B Investor"), unless and until such time as such Series B Investor directly or indirectly become the Beneficial Owner of Common Shares other than Common Shares received (i) as a dividend on, or as a result of any conversion or redemption of, any shares of the Series B-1 Convertible Preferred Stock, \$.10 par value per share, or Series B-2 Convertible Preferred Stock, \$.10 par value per share, of the Company, (ii) upon exercise of warrants issued by the Company pursuant to the Securities Purchase Agreement, dated as of the date hereof, between the Company and the Series B Investors, or (iii) otherwise pursuant to such Securities Purchase Agreement or to the Registration Rights Agreement, dated as of the date hereof, between the Company and the Series B Investors. In addition, Exempt Person shall include any Person to whom or which a Series B Investor transfers any shares of such Series B-1 Convertible Preferred Stock or Series B-2 Convertible Stock or any of such warrants."

IN WITNESS WHEREOF, the parties have duly executed this Amendment No. 2 as of the date first written above.

ASPEN TECHNOLOGY, INC.

By: /s/ Lisa W. Zappala

Name: Lisa W. Zappala Title: Senior Vice President, Finance and Chief Financial Officer

AMERICAN STOCK TRANSFER & TRUST COMPANY, as Rights Agent

By: /s/ Herbert L. Lemmer Name: Herbert L. Lemmer Title: Vice President