

SECURITIES AND EXCHANGE COMMISSION
 WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT
 UNDER THE SECURITIES ACT OF 1933

Aspen Technology, Inc.

 (Exact Name of Registrant as Specified in Its Charter)

Delaware

 (State or Other Jurisdiction of Incorporation or Organization)

04-2739697

 (I.R.S. Employer Identification No.)

Ten Canal Park, Cambridge, Massachusetts 02141

 (Address of Principal Executive Offices) (Zip Code)

Aspen Technology, Inc. 1996 Special Stock Option Plan

 (Full Title of the Plan)

Lawrence B. Evans
 Aspen Technology, Inc.
 Ten Canal Park
 Cambridge, Massachusetts 02141

 (Name and Address of Agent for Service)

(617) 577-0100

 (Telephone Number, Including Area Code, of Agent For Service)

With copies to:

Stephen J. Doyle, Esq.
 Vice President and General Counsel
 Aspen Technology, Inc.
 Ten Canal Park
 Cambridge, Massachusetts 02141

Mark L. Johnson, Esq.
 Foley, Hoag & Eliot LLP
 One Post Office Square
 Boston, Massachusetts 02109

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share (1)	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee
Common Stock, \$.10 par value	250,000 shares	\$66.875 (2)	\$16,718,750	\$5,067

- (1) Estimated solely for the purpose of determining the registration fee.
(2) In accordance with Rules 457(c) and (h) under the Securities Act of 1933, the above calculation is based on the average of the high and low sale prices reported in the consolidated reporting system of the Nasdaq National Market on February 5, 1997.

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PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The following documents heretofore filed by Aspen Technology, Inc. (the "Registrant") with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are incorporated by reference in this Registration Statement: (1) the Registrant's Annual Report on Form 10-K for the fiscal year ended June 30, 1996 (the "Annual Report"); (2) the Registrant's definitive Proxy Statement dated November 11, 1996 used in connection with its Annual Meeting of Stockholders held on December 16, 1996; (3) the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1996; (4) the Registrant's Current Report on Form 8-K dated January 29, 1997; and (5) the description of the Common Stock contained in the Registrant's registration statement filed with the SEC under Section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

In addition, all reports and other documents subsequently filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregister all of such securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS OR COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article 6 of the Company's Restated Articles of Organization provides that the Company shall indemnify each person who is or was a director, officer, employee or other agent of the Company, and each person who is or was serving at the request of the Company as a director, trustee, officer, employee or other agent of another organization in which it directly or indirectly owns shares or of which it is directly or indirectly a creditor, against all liabilities, costs and expenses reasonably incurred by any such persons in connection with the defense or disposition of or otherwise in connection with or resulting from any action, suit, or other proceeding in which they may be involved by reason of being or having been such a director, officer, employee agent or trustee, or by reason of any action taken or not taken in such capacity, except with respect to any matter as to which such person shall have been finally adjudicated by a court of competent jurisdiction not to have acted in good faith in the reasonable belief that his or her action was in the best interests of the Company. The provisions of the Company's Articles pertaining to indemnification

may not be amended and no provision inconsistent therewith may be adopted without the approval of either the Board of Directors or the holders of at least a majority of the voting power of the Company. These provisions do not eliminate a director's duty of care. Moreover, the provisions do not apply to claims against a director for violations of certain laws, including federal securities laws. Section 67 of Chapter 156B of the Massachusetts Business

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Corporation Law authorizes a corporation to indemnify its directors, officers, employees and other agents unless such person shall have been adjudicated in any proceeding not to have acted in good faith in the reasonable belief that such action was in the best interests of the corporation.

The Company maintains a directors' and officers' insurance policy that covers certain liabilities of directors and officers of the Company, including liabilities under the Securities Act of 1933. The Company maintains a general liability insurance policy that covers certain liabilities of directors and officers of the Company arising out of claims based on acts or omissions in their capacities as directors or officers.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

ITEM 8. EXHIBITS

EXHIBIT
NUMBER

- 4.1(a)* Restated Articles of Organization of the Registrant, as filed with the Secretary State of the Commonwealth of Massachusetts on November 1, 1994
- 4.1(b) Articles of Amendment to the Restated Articles of Organization of the Registrant, as filed with the Secretary of State of the Commonwealth of Massachusetts on January 6, 1997
- 4.2* By-Laws of the Registrant
- 4.3* Specimen certificate for the Common Stock
- 4.4 Aspen Technology, Inc. 1996 Special Stock Option Plan
- 5.1 Opinion of Foley, Hoag & Eliot LLP
- 23.1 Consent of Arthur Andersen LLP
- 23.2 Consent of Foley, Hoag & Eliot LLP (included in Exhibit 5.1)
- 24 Power of Attorney (included on pages II-4 and II-5)

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* Filed as an exhibit to the Company's Registration Statement on Form S-1 (registration number 33-88734), as filed with the Commission on January 29, 1995, and incorporated herein by reference.

ITEM 9. UNDERTAKINGS

1. The undersigned Registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

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(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

PROVIDED, HOWEVER, that paragraphs 2 (a)(1)(i) and 2 (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference herein.

(b) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Massachusetts, on this tenth day of February, 1997.

ASPEN TECHNOLOGY, INC.

/s/ LAWRENCE B. EVANS

By:-----
 Lawrence B. Evans
 Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Lawrence B. Evans, Mary A. Palermo, Joel B. Rosen and Lisa W. Zappala, and each of them, true and lawful attorneys-in-fact and agents with full power of substitution, for and in name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing which they, or any of them, may deem necessary or advisable to be done in connection with this Registration Statement, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or any substitute or substitutes for any or all of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the indicated capacities as of February 10, 1997.

SIGNATURE	TITLE
/s/ LAWRENCE B. EVANS ----- Lawrence B. Evans	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
/s/ MARY A. PALERMO ----- Mary A. Palermo	Executive Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ JOSEPH F. BOSTON ----- Joseph F. Boston	Director

----- Director
Gresham T. Brebach, Jr.

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/s/ DOUGLAS R. BROWN
----- Director
Douglas R. Brown

----- Director
Joan C. McArdle

/s/ ALISON ROSS
----- Director
Alison Ross

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INDEX TO EXHIBITS

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24	Power of Attorney (included on pages II-4 and II-5)

* Filed as an exhibit to the Company's Registration Statement on Form S-1 (registration number 33-88734), as filed with the Commission on January 29, 1995, and incorporated herein by reference.

THE COMMONWEALTH OF MASSACHUSETTS
 WILLIAM FRANCIS GALVIN
 Secretary of the Commonwealth
 One Ashburton Place, Boston, Massachusetts 02108-1512

ARTICLES OF AMENDMENT
 (GENERAL LAWS, CHAPTER 156B, SECTION 72)

We, Joseph F. Boston, President, and Stephen J. Doyle, Assistant Clerk, of Aspen Technology, Inc., located at: Ten Canal Park, Cambridge, MA 02141, certify that these Articles of Amendment affecting articles numbered: Article 3 and Article 4 of the Articles of Organization were duly adopted at a meeting held on December 16, 1996, by vote of: 5,241,622 shares of Common of 9,729,730 shares outstanding, being at least a majority of each type, class or series outstanding and entitled to vote thereon.

That Section 3 of the Corporation's Articles of Organization is hereby amended to read in its entirety as follows:

3. The total number of shares and the par value, if any, of each class of capital stock which the corporation is authorized to issue as follows:

CLASS OF STOCK	WITHOUT PAR VALUE		WITH PAR VALUE	
	NUMBER OF SHARES	NUMBER OF SHARES	PAR VALUE	
Preferred		10,000,000	\$0.10	
Common		40,000,000	\$0.10	

That Section 4 of the Corporation's Articles of Organization is hereby amended to read in its entirety as follows:

4. If more than one class is authorized, a description of each of the different classes of stock, with, if any, the preferences, voting powers, qualifications, special or relative rights or privileges as to each class thereof and any series now established:

The Corporation shall have authority to issue 50,000,000 shares of capital stock of which 40,000,000 shares shall be Common Stock in the amount as set forth below and 10,000,000 shares shall be preferred stock in the amount set forth below:

CLASSIFICATION	NO. OF SHARES	PAR VALUE
Common Stock	40,000,000	\$0.10
Preferred Stock	10,000,000	\$0.10

The shares of preferred stock may be issued from time to time in one or more classes or series. The Board of Directors is hereby authorized to establish and designate the different class or series, and to fix and determine preferences, voting powers, qualifications, and special or relative rights or privileges thereof and such designations as shall be stated in a vote or votes providing for the issue of such class or series adopted by the Board of Directors, which preferences, voting powers, qualifications, and special or relative rights or privileges need not be uniform among class or series. Any of the preferences, voting powers, qualifications, and special or relative rights or privileges of any such class or series of stock may be made dependent upon facts ascertainable outside the vote or votes providing for the issue of such stock

adopted by the Board of Directors, provided that the manner in which such facts shall operate upon the preferences, voting powers, qualifications,

and special or relative rights or privileges of such class or series of stock is clearly and expressly set forth in the vote or votes providing for the issue of such class or series adopted by the Board of Directors. Prior to the issuance of any shares of the class or series having terms so determined by the Board of Directors other than a reissue of shares as shares of the same class and series, the Corporation shall submit to the Secretary of State a certificate signed by the President or a Vice President and by the Clerk or an Assistant Clerk setting forth the text of the vote or votes of the Board of Directors determining the terms of the class or series or the number of votes and a certificate that such vote or votes were duly adopted by the Board of Directors.

To change the number of shares and the par value (if any) of any type, class or series of stock which the corporation is authorized to issue, fill in the following:

The total PRESENTLY authorized is:

WITHOUT PAR VALUE STOCKS		WITH PAR VALUE STOCKS		
TYPE	NUMBER OF SHARES	TYPE	NUMBER OF SHARES	PAR VALUE
Common:		Common:	15,000,000	.10
Preferred:		Preferred:	10,000,000	.10

CHANGE the total authorized to:

WITHOUT PAR VALUE STOCKS		WITH PAR VALUE STOCKS		
TYPE	NUMBER OF SHARES	TYPE	NUMBER OF SHARES	PAR VALUE
Common:		Common:	40,000,000	.10
Preferred:		Preferred:	10,000,000	.10

The foregoing amendment(s) will become effective when these Articles of Amendment are filed in accordance with General Laws, Chapter 156B, Section 6 unless these articles specify, in accordance with the vote adopting the amendment, a LATER effective date not more than THIRTY DAYS after such filing, in which event the amendment will become effective on such later date.

Later effective date: _____

SIGNED UNDER THE PENALTIES OF PERJURY, this 6th day of January, 1997.

/s/ JOSEPH F. BOSTON, President
/s/ STEPHEN J. DOYLE, Assistant Clerk

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I hereby approve the within Articles of Amendment, and the filing fee in the amount of \$25,100 having been paid, said article is deemed to have been filed with me this 6th day of January, 1997.

EFFECTIVE DATE: _____

/s/ WILLIAM FRANCIS GALVIN
WILLIAM FRANCIS GALVIN
SECRETARY OF THE COMMONWEALTH

TO BE FILLED IN BY CORPORATION
Photocopy of document to be sent to:

Aspen Technology, Inc.
Ten Canal Park
Cambridge, MA 02141
Attn: Karen Hrynyszyn

ASPEN TECHNOLOGY, INC.

1996 SPECIAL STOCK OPTION PLAN

1. DEFINITIONS. As used in this 1996 Special Stock Option Plan of Aspen Technology, Inc., the following terms shall have the following meanings:

1.1. CHANGE IN CORPORATE CONTROL means the date on which any individual, corporation, partnership or other person or entity (together with its "Affiliates" and "Associates," as defined in Rule 12b-2 under the Securities Exchange Act of 1934) "beneficially owns" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934) in the aggregate 20% or more of the outstanding shares of capital stock of the Company entitled to vote generally in the election of directors of the Company.

1.2. CODE means the Internal Revenue Code of 1986, as amended.

1.3. COMMITTEE means the Compensation Committee of the Company's Board of Directors.

1.4. COMPANY means Aspen Technology, Inc., a Massachusetts corporation.

1.5. DATE OF ACQUISITION means the closing date of an acquisition, and if a business is acquired in more than one purchase transaction, the last closing date to occur, provided such closings are related transactions under a plan for the acquisition of such business by the Company.

1.6. DIRECTOR means any person on the board of directors of an acquired business, excluding however persons who were employed by the Company prior to and on the date of acquisition of such business by the Company.

1.7. EMPLOYEE means any person employed by an acquired business prior to and on the date of acquisition of such business by the Company.

1.8. FAIR MARKET VALUE means the value of a share of Stock of the Company on any date as determined by the Committee.

1.9. GRANT DATE means the date on which an Option is granted, as specified in Section 7.

1.10. INCENTIVE OPTION means an option which qualifies for tax treatment under Section 422 of the Code.

1.11. MAJOR SHAREHOLDER means a person who, within the meaning of Section 422(b)(6) of the Code, is deemed to own stock possessing more than 10% of the total combined voting power of all classes of stock of the Company (or of its parent or subsidiary corporations).

1.12. OPTION means an option to purchase shares of the Stock granted under the Plan.

1.13. OPTION AGREEMENT means an agreement between the Company and an Optionee, setting forth the terms and conditions of an Option.

1.14. OPTION PRICE means the price paid by an Optionee for a share of Stock under this Plan.

1.15. OPTION SHARE means any share of Stock of the Company

transferred to an Optionee upon exercise of an Option pursuant to this Plan.

1.16. OPTIONEE means a person eligible to receive an Option, as provided in Section 6, to whom an Option shall have been granted under the Plan.

1.17. PLAN means this 1996 Special Stock Option Plan of the Company.

1.18. RELATED CORPORATION means a Parent Corporation or a Subsidiary Corporation, each as defined in Section 424 of the Code.

1.19. STOCK means common stock, \$.10 par value, of the Company.

2. PURPOSE. This 1996 Special Stock Option Plan is intended to encourage ownership of the Stock by Employees, consultants and Directors of businesses acquired by the Company and to provide additional incentive for them to promote the success of the Company's business. The Plan is intended to be an incentive stock option plan within the meaning of Section 422 of the Code, but not all the Options must be Incentive Options.

3. TERM OF THE PLAN. Options under the Plan may be granted not later than November 30, 2006.

4. STOCK SUBJECT TO THE PLAN. Subject to the provisions of Section 16 of the Plan, the number of shares of the Stock attributable to the exercise of Options granted under the Plan plus the number of shares then issuable upon exercise of outstanding options granted under the Plan shall at no time exceed 250,000. Shares to be issued upon the exercise of Options granted under the Plan may be either authorized but unissued shares or shares held by the Company in its treasury. If any Option expires or terminates for any reason without having been exercised in full, the shares not purchased thereunder shall again be available for Options thereafter to be granted.

5. ADMINISTRATION. The Plan shall be administered by the Committee. Subject to the provisions of the Plan, the Committee shall have complete authority, in its discretion, to make the following determinations with respect to each Option to be granted by the Company: (a) the Employee or consultant or Director of an acquired business to receive the Option; (b) the time of granting the Option; (c) the number of shares subject thereto; (d) the Option Price; (e) the Option period; and (f) if the Optionee is an employee after the acquisition is effected, whether the Option is an Incentive Option. In making such determinations, the Committee may take into account the nature of the services rendered by the Employees and consultants and Directors, their present and potential contributions to the success of the Company and its Related Corporations, and such other factors as the Committee in its discretion shall deem relevant. Subject to the provisions of the Plan, the Committee shall also have complete authority to interpret the Plan, to prescribe, amend and rescind rules and regulations relating to it, to determine the terms and provisions of the respective Option Agreements (which need not be identical), and to make all other determinations necessary or advisable for the administration of the Plan. The Committee's determinations on the matters referred to in this Section 5 shall be conclusive.

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6. ELIGIBILITY. An Option may be granted only to an Employee, consultant or Director of a business acquired by the Company. A Major Shareholder shall be eligible to receive an Incentive Option only if the Option Price is at least 110% of the Fair Market Value on the Grant Date and only if the Incentive Option expires, to the extent not theretofore exercised, on the fifth anniversary of the Grant Date.

7. TIME OF GRANTING OPTIONS. The granting of an Option shall take place at the time specified by the Committee, but not later than six months after the Date of Acquisition with respect to which the grant is made. Only if

expressly so provided by the Committee, shall the Grant Date be the date on which an Option Agreement shall have been duly executed and delivered by the Company and the Optionee.

8. OPTION PRICE. The Option Price under each Incentive Option shall be not less than 100% of the Fair Market Value of the Stock on the Grant Date except that the Option Price under an Incentive Option granted to a Major Shareholder must be not less than 110% of the Fair Market Value.

9. OPTION PERIOD. No Option may be exercised later than the tenth anniversary of the Grant Date or, for an Incentive Option granted to a Major Shareholder, the fifth anniversary of the Grant Date. Unless the Committee otherwise determines, all Options granted hereunder shall permit the Optionee to purchase, cumulatively, one-sixteenth of the Option Shares at the end of each calendar quarter beginning after the Grant Date. Upon a Change in Corporate Control, each outstanding Option shall immediately become fully exercisable.

10. MAXIMUM SIZE OF OPTION. To the extent that the aggregate Fair Market Value of Stock for which an Incentive Option becomes exercisable by an Optionee for the first time in any calendar year exceeds \$100,000, the Option shall be treated as a nonstatutory option, and not an Incentive Option. For purposes of this Section 10, all Options granted to an Optionee by the Company shall be considered in the order in which they were granted, and the Fair Market Value shall be determined as of the Grant Dates.

11. EXERCISE OF OPTION. An Option may be exercised only by giving written notice, in the manner provided in Section 20 hereof, specifying the number of shares as to which the Option is being exercised, accompanied by (a) full payment for such shares in the form of check or bank draft payable to the order of the Company, or (b) certificates representing shares of the Stock with a current Fair Market Value equal to the Option Price of the shares to be purchased, or (c) irrevocable instructions to a brokerage firm to sell a sufficient number of the Option Shares to generate the full exercise price plus all applicable withholding taxes and to pay over to the Company such proceeds of sale. Receipt by the Company of such notice and payment shall constitute the exercise of the Option or a part thereof. The Company shall thereafter deliver or cause to be delivered to the Optionee a certificate or certificates for the number of shares then being purchased by the Optionee. Such shares shall be fully paid and nonassessable. If any law or applicable regulation of the Securities and Exchange Commission or other body having jurisdiction in the premises shall require the Company or the Optionee to take any action in connection with shares being purchased upon exercise of the option, exercise of the option and delivery of the certificate or certificates for such shares shall be postponed until completion of the necessary action, which shall be taken at the Company's expense.

12. NOTICE OF DISPOSITION OF STOCK PRIOR TO EXPIRATION OF SPECIFIED HOLDING PERIOD. The Company may require that the person exercising an Incentive Option give a written representation to the Company, satisfactory in form and substance to its counsel and upon which the Company may reasonably rely, that he or she will report to the Company any disposition of shares

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purchased upon exercise prior to the expiration of the holding periods specified by Section 422(a)(1) of the Code. If and to the extent that the disposition imposes upon the Company federal, state, local or other withholding tax requirements, or any such withholding is required to secure for the Company an otherwise available tax deduction, the Company shall have the right to require that the person making the disposition remit to the Company an amount sufficient to satisfy those requirements.

13. TRANSFERABILITY OF OPTIONS. Options shall not be transferable, otherwise than by will or the laws of descent and distribution, and may be exercised during the life of the Optionee only by the Optionee.

14. STOCK PURCHASE AGREEMENT. Each Optionee exercising an option, at the request of the Company, will be required to sign a Stock Purchase Agreement representing in form satisfactory to counsel for the Company that he or she will

not transfer, sell or otherwise dispose of the Option Shares at any time purchased by him or her, upon the exercise of any portion of the Option, in a manner which would violate the Securities Act of 1933, as amended, and the regulations of the Securities and Exchange Commission thereunder; and the Company may, at its discretion, make a notation on any certificates issued upon exercise of options to the effect that such certificate may not be transferred except after receipt by the Company of an opinion of counsel satisfactory to it to the effect that such transfer will not violate such Act and such regulations, and may issue "stop transfer" instructions to its transfer agent, if any, and make a "stop transfer" notation on its books as appropriate. Such Stock Purchase Agreement shall include such other provisions as the Committee may determine are appropriate.

15. TERMINATION OF EMPLOYMENT. In the event that the Optionee's employment or consulting relationship is terminated for any reason other than death or the Optionee's employer is no longer the Company or a Related Corporation, the Option, to the extent exercisable at termination, may be exercised by the Optionee at any time within 30 days after termination unless terminated earlier by its terms. If termination results from the death of the Optionee, the Option, to the extent exercisable at the date of death, may be exercised by the person to whom the Option is transferred by will or the applicable laws of descent and distribution, at any time within 12 months after the date of death, unless terminated earlier by its terms. Military or sick leave shall not be deemed a termination of employment provided that it does not exceed the longer of 90 days or the period during which the absent employee's re-employment rights are guaranteed by statute or by contract.

16. ADJUSTMENT OF NUMBER OF SHARES. Each Option Agreement shall provide that in the event of any capital adjustments including stock splits, stock contractions, stock dividends, reclassifications, exchanges and substitutions, occurring after the date of the option and prior to the exercise in full of the option, the number of shares for which the option may be exercised and the price per share shall be proportionately adjusted and in the event of any resulting changes in the outstanding Stock, the number of shares of the Stock available for the purpose of the Plan as stated in Section 4 hereof shall be correspondingly adjusted.

17. STOCK RESERVED. The Company shall at all times during the term of the Option reserve and keep available such number of shares of the Stock as will be sufficient to satisfy the requirements of this Plan and shall pay all fees and expenses necessarily incurred by the Company in connection therewith.

18. LIMITATION OF RIGHTS IN THE OPTION SHARES. An Optionee shall not be deemed for any purpose to be a stockholder of the Company with respect to any of the Option Shares except to the extent that the Option shall have been exercised with respect thereto and, in addition, a certificate shall have been issued therefor and delivered to the Optionee.

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19. TERMINATION AND AMENDMENT OF THE PLAN. The Board of Directors of the Company may at any time terminate the Plan or make such amendment to the Plan as it shall deem advisable, provided that, except as provided in Section 16, it may not, without the approval by the holders of a majority of the Stock, change the classes of persons eligible to receive Options, increase the maximum number of shares available for option under the Plan or extend the period during which Options may be granted or exercised. No termination or amendment of the Plan may, without the consent of the Optionee to whom any Option shall theretofore have been granted, adversely affect the rights of such Optionee under such Option. The Company may also, in its discretion, permit any option to be exercised prior to the date on which it vests.

20. NOTICES. Any communication or notice required or permitted to be given under the Plan shall be in writing, and mailed by registered or certified mail or delivered in hand, if to the Company, to its Chief Financial Officer at Ten Canal Park, Cambridge, MA 02141 and, if to the Optionee, to the address as the Optionee shall last have furnished to the Company.

FOLEY, HOAG & ELIOT LLP
One Post Office Square
Boston, Massachusetts 02109-2170
Telephone: (617) 832-1000
Facsimile: (617) 832-7000
Telex 940693
<http://www.fhe.com>

February 11, 1997

ASPEN TECHNOLOGY, INC.
Ten Canal Park
Cambridge, Massachusetts 02141

Ladies and Gentlemen:

We have acted as counsel for Aspen Technology, Inc., a Massachusetts corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended, of a Registration Statement on Form S-8 (the "Registration Statement") relating to the offering of up to 250,000 shares (the "Shares") of the Company's common stock, \$.10 par value, issuable, either under options currently issued and outstanding or under options issuable subsequent to the date hereof, pursuant to the Aspen Technology, Inc. 1996 Special Stock Option Plan (the "Plan").

In arriving at the opinions expressed below, we have examined and relied on the following documents:

- (i) the Registration Statement;
- (ii) the Plan;
- (iii) the Articles of Organization of the Company, as amended as of the date hereof;
- (iv) the By-Laws of the Company, as amended as of the date hereof; and
- (v) the records of meetings and consents of the Board of Directors and stockholders of the Company provided to us by the Company.

In addition, we have examined and relied on the originals or copies certified or otherwise identified to our satisfaction of all such other records, documents and instruments of the Company and such other persons, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinions expressed below. We have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals and the conformity to the original documents of all documents submitted to us as certified or photostatic copies.

We express no opinion other than as to the laws of the Commonwealth of Massachusetts.

Based upon the foregoing, we are of the opinion that:

1. The Company has the corporate power necessary for the issuance of the Shares under the Plan, as contemplated by the Registration Statement.

2. The Shares have been duly authorized and, when issued against payment of the agreed consideration therefor in accordance with the exercise prices therefor as described in the respective options relating thereto and the Plan, will be validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement.

Very truly yours,

FOLEY, HOAG & ELIOT LLP

By /s/ Mark L. Johnson

A Partner

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report included in the Annual Report on Form 10-K of Aspen Technology, Inc. for the fiscal year ended June 30, 1996.

/s/ Arthur Andersen LLP
ARTHUR ANDERSEN LLP

Boston, Massachusetts
February 10, 1997