

| OMB APPROVAL | |
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| | | |
|---|---|--|
| 1. Name and Address of Reporting Person* <u>FUSCO MARK</u> (Last) (First) (Middle) <u>C/O ASPEN TECHNOLOGY, INC.</u> <u>200 WHEELER ROAD</u> (Street) <u>BURLINGTON MA 01803</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>ASPEN TECHNOLOGY INC /DE/ [AZPN]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <p style="text-align: center;">President and CEO</p> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>11/09/2009</u> | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-----------------------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock ⁽¹⁾ | 11/09/2009 | | A | | 433,667 | A | \$0.00 ⁽²⁾ | 497,874 | D | |
| Common Stock ⁽³⁾ | 11/09/2009 | | F | | 56,288 | D | \$9.55 | 441,586 | D | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|----------------------------|--|--|---|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Common Stock Option (Right to Buy) | \$9.55 | 11/09/2009 | | A | | 117,529 | | (4) | 11/08/2019 | Common Stock | 117,259 | \$0 | 117,259 | D | |
| Common Stock (Right to Buy) | \$9.55 | 11/09/2009 | | A | | 10,471 | | (5) | 11/08/2019 | Common Stock | 10,471 | \$0 | 10,471 | D | |

Explanation of Responses:

- Each restricted stock unit represents a contingent right to receive one share of Aspen Technology, Inc. common stock.
- Restricted stock units do not have an exercise price.
- Shares withheld by Registrant to satisfy statutory tax withholding requirements on vesting of restricted stock units and distribution of stock.
- The option granted at the exercise price of \$9.55 was vested as to 80,000 shares on the date of grant. The balance vests in 4 increments of 8,000 shares on the last day of each quarter beginning in the first quarter of 2010, and a final increment of 5,529 shares vesting on June 30, 2011.
- The option was granted at the exercise price of \$9.55 and will vest as to 8,000 shares on March 31, 2011, and the balance of 2,471 shares will vest on June 30, 2011.

/s/ F. G. Hammond, Attorney-in-Fact 11/12/2009

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.