Roscher Fred
Form 4
November 18, 2009

# FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

OMB APPROVAL

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
Roscher Fred

(Last) (First) (Middle)

400 W. CALIFORNIA AVE

(Street)

SUNNYVALE, CA 95037

(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
APPLIED SIGNAL TECHNOLOGY INC [APSG]

3. Date of Earliest Transaction (Month/Day/Year)
11/16/2009

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
EVP-Broadband Com System

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

**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 | 11/16/2009 | | F | | 803 | D | $ 20.57 | 33,136 | D | |
| Common Stock | | | | | | | | 6,557 | I | Spouse |

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

**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 control number.**

SEC 1474 (9-02)

**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 Underlying Securities (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Nu Deriv Secur Bene Owne Follo Repo Trans (Instr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | |

# Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---|---|---|---|
| | Director | 10% Owner | Officer | Other |
| Roscher Fred<br>400 W. CALIFORNIA AVE<br>SUNNYVALE, CA 95037 | | | EVP-Broadband Com System | |

# Signatures

| Fred Roscher | 11/18/2009 |
|---|---|
| **Signature of Reporting Person | Date |

# Explanation of Responses:

***** 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.
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