Instruction 1(b)

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| | OMB APPROVAL | | | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|--|
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| | Estimated average burden | | | | | | | |
| 1 | hours per response: | 0.5 | | | | | | |

or Section 30(h) of the Investment Company Act of 1940 5. Relationship of Reporting Person(s) to Issuer 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person (Check all applicable) APPLIED MATERIALS INC /DE [AMAT] **EDMAN THOMAS T** Director 10% Owner Officer (give title Other (specify below) below) 3. Date of Earliest Transaction (Month/Day/Year) (Last) (First) (Middle) Group VP & GM, Display 12/05/2011 C/O APPLIED MATERIALS, INC P.O. BOX 58039, 3050 BOWERS AV, M/S 1268 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable (Street) X Form filed by One Reporting Person 95054 SANTA CLARA CA Form filed by More than One Reporting (City) (State) (Zip)

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

| | | | | | | _ | | | | | | | | |
|--|---|--|---|---------------------------------|---|------------------------------|---|---|---|---------------|--|---|---|--|
| 1. Title of Security (Instr. 3) | | | | /Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transa Code (8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | and Sec Ben Owr | mount of urities eficially ed Following orted | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | Code | v | Amount | (A) (D) |) or) Pri | _ Trair | saction(s) r. 3 and 4) | | (IIISU. 4) |
| Common Stock | | | | 5/2011 | A 1 | | 150,000 | (1) | A | \$0 3 | 09,581 ⁽²⁾ | 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. Transactio Code (Insti | n of | Expiration | Date Exercisable and piration Date onth/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price o Derivative Security (Instr. 5) | | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |

Explanation of Responses:

1. Represents performance shares (restricted stock units) that will be converted on a one-for-one basis into shares of Applied Materials, Inc. common stock upon vesting. These performance shares will vest only after the achievement of specified performance goals. Provided such goals are achieved, vesting is scheduled to occur no earlier than in four equal annual installments beginning December 19, 2012 (subject to continued employment through each vest date). The number of shares shown is the target award level. The actual number of shares that may vest ranges from 0% to 150% of the target amount, depending on achievement of specified performance goals.

Exercisable

(Instr. 3, 4

and 5)

(A) (D)

2. Number of shares includes 128,000 performance shares (restricted stock units) that in the future will be converted on a one-for-one basis into shares of Applied Materials, Inc. common stock upon vesting, which vesting is scheduled to occur as follows: (a) 12,500 shares are scheduled to vest in installments during each July of 2012 and 2013; (b) 93,000 shares are scheduled to vest in installments during each January of 2012 through 2015; and (c) 22,500 shares are scheduled to vest in installments during each February of 2012 through 2014 (all vesting is subject to continued employment through each vest date).

> /s/ Charmaine Mesina Attorney-in-Fact

12/07/2011

(Instr. 4)

** Signature of Reporting Person

Amount Number

Shares

Expiration

Title

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).

Code

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.