FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| l | OMB APPRO | DVAL | | | | | | | |
|---|--------------------------|-----------|--|--|--|--|--|--|--|
| l | OMB Number: | 3235-0287 | | | | | | | |
| l | Estimated average burden | | | | | | | | |
| l | hours per response: | 0.5 | | | | | | | |

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* Sweeney Joseph J (Last) (First) (Middle) | | | | | | | 2. Issuer Name and Ticker or Trading Symbol APPLIED MATERIALS INC /DE [AMAT] 3. Date of Earliest Transaction (Month/Day/Year) 12/10/2007 | | | | | | | | | oplicable) ector icer (give title ow) | g Person(s) to Is 10% C Other below Corp. Secreta | Owner (specify) |
|--|---|--|--------|--|-------|--|---|--------------------------------|------------------------------------|--|---|--|---------------|--|---|---|--|--|
| C/O APPLIED MATERIALS, INC. P.O. BOX 58039, 3050 BOWERS AV, M/S 2023 (Street) SANTA CLARA CA 95054 | | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | . Individual or Joint/Group Filing (Check Applicable ine) X Form filed by One Reporting Person Form filed by More than One Reporting | | | |
| (City) | (St | ate) (| (Zip) | | | | | | | | | | | | Pe | rson | | |
| Table I - Non-Derivat 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day | | | | | | | ction 2A. Deemed Execution Date, | | | auired, Disposed of, or Benefi 3. 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, Code (Instr. 5) | | | | (A) or | 5. Amount of | | 6. Ownership Form: Direct (D) or Indirect | 7. Nature of Indirect Beneficial |
| (wonth) | | | | | | (Month/Day/Year) | | | 8) | v | Amount | | (A) or (D) | Price | Owr Rep Tran | ed Following orted saction(s) r. 3 and 4) | (I) (Instr. 4) | Ownership (Instr. 4) |
| Common Stock 12/10/2 | | | | | | | 2007 | | | | 100,000 ⁽¹⁾ A | | A | \$(|) 3 | 28,928(2) | D | |
| Common Stock | | | | | | | | | | | | | | | 9, | 128.192(3) | I | By the 401(k) Plan |
| 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) | if any | cution Date, ny C nnth/Day/Year) 8 | | sansaction de (Instr. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | ative rities ired sed | 6. Date E Expiratio (Month/D | 9 | Amount of Securities Underlying Derivative Security (Instr. and 4) Amount or Number of Security (Instr. and 4) | | ount nber | 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 satisfaction of specified performance goals. Provided such goals are achieved, vesting is scheduled to occur no earlier than in four equal annual installments beginning 12/19/08 (subject to continued employment).
- 2. Number of shares also includes 206,000 performance shares (restricted stock units) previously reported 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: 6,000 performance shares are scheduled to vest in two equal annual installments beginning 8/31/08; and, provided specified performance goals are achieved, 200,000 performance shares are scheduled to vest no earlier than in four equal annual installments beginning 12/19/07 (all vesting is subject to continued employment).
- 3. Increased number of shares reflects dividend reinvestment and periodic allocation of accrued interest (which interest was automatically converted into shares) to all participants under 401(k) Plan that are exempt under Rule 16b-3.

/s/ Charmaine Mesina, 12/12/2007 Attorney-in-Fact

** Signature of Reporting Person

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.

The undersigned hereby constitutes and appoints each of Charmaine Mesina and Mary Zeigler, signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer of Applied Materials, Inc. (the "Company"), Forms 3, 4 and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 or 5, complete and execute any amendment(s) thereto, and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-infact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-infact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorneyin-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 24th day of March,

> /s/ Joseph J. Sweeney _____

Joseph J. Sweeney