FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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| OMB APPROVAL | | | | | | | | | |
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hours per response:

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

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

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|--|--|--|--------------------------|----------|--|------|--------------------------------------|-----------|---|--------|---------------------|---|------------------------------------|---|------------------|--|---|------------------------|--|--|
| 1. Name and Address of Reporting Person [*] <u>Thakur Randhir</u> | | | | | 2. Issuer Name and Ticker or Trading Symbol APPLIED MATERIALS INC /DE [AMAT] | | | | | | | | | | | all app | | g Per | 10% O | wner |
| (Last) (First) (Middle) C/O APPLIED MATERIALS, INC. P.O. BOX 58039, 3050 BOWERS AV, M/S 2023 | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 12/06/2010 | | | | | | | | | | X | belov | fficer (give title Other (spelow) below) EVP & General Manager | | | |
| (Street) SANTA CLARA CA 95054 (City) (State) (Zip) | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | . Indiv ine) X | Forn Forn | ual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | |
| | | Tabl | e I - Nor | า-Deriva | ative | Sec | curitie | s Acq | uired, | Dis | posed o | f, or | Ben | efici | ally (| Owne | ed | | | |
| 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da | | | Execu ay/Year) if any | | A. Deemed xecution Date, any //onth/Day/Year) | | Transaction Disposed Code (Instr. 5) | | ities Acquired (A) d Of (D) (Instr. 3, | | | 4 and So | | 5. Amount of Securities Beneficially Owned Following Reported | | wnership n: Direct or Indirect nstr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | Code | v | Amount (A) or (D) | | Pric | е | Transaction(s) (Instr. 3 and 4) | | | | (111501.4) | | | |
| Common | Stock | | | 12/06/ | 2010 | | | | A | | 250,000 |)(1) | A | \$ | 5 <mark>0</mark> | 638 | 3,680 ⁽²⁾⁽³⁾ | | D | |
| Common Stock | | | | | | | | | | | | | | | 3,0 | 51.134(4) | | I | By the 401(k) Plan | |
| | | Та | | | | | | | | | sed of, onvertib | | | | | vned | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | Execution Date, if any | | 4. Transaction Code (Instr. 8) | | of | | 6. Date Exercis. Expiration Date (Month/Day/Yea | | е | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) | | str. 3 | | vative urity | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | C F D O (I | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | Code | v | (A) | | Date Exercisa | | Expiration Date | Title | or Nur of | nber | | | | | | |

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 12/19/2011 (subject to continued employment through each vest date).
- 2. Increased number of shares reflects periodic payroll acquisitions under Employees' Stock Purchase Plan that are exempt under Rule 16a-10 and Rule 16b-3. Number of shares also includes 385,625 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: (a) 39,375 shares are scheduled to vest in two equal annual installments beginning 12/19/10; (b) 86,563 shares are scheduled to vest on 12/19/2010; (c) 30,000 shares are scheduled to vest on 12/19/2011; (Continued in Footnote 3)
- 3. (d) provided specified performance goals are achieved, 109,687 shares are scheduled to vest on 12/19/11; and (c) provided specified performance goals are achieved, 120,000 shares are scheduled to vest: (i) as to 20,000 shares no earlier than 12/19/2011 and (ii) as to 100,000 shares no earlier than in two equal annual installments beginning 12/19/2012 (all vesting is subject to continued employment through each vest date).
- 4. Increased number of shares reflects periodic payroll acquisitions and dividend reinvestment under the 401(k) Plan that are exempt under Rule 16b-3.

/s/ Charmaine Mesina, Attorney-in-Fact 12/08/2010

** 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.

POWER OF ATTORNEY

The undersigned hereby constitutes and appoints each of Charmaine Mesina and Yvonne Leyba 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-in-fact 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-in-fact 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 attorney-in-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 26th day of May, 2008.

/s/ Randhir Thakur Randhir Thakur