FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

wasningtor	1, D.C.	20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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

(Last) C/O APP	oaum Ma (Fii LIED MAT		Middle)	023	3. D										heck al	applical Director Officer (g elow)	able)	Person(s) to Is 10% C Other below) President	Owner (specify
(Street)	CLARA CA	A 9	95054 Zip)		4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)									ne) <mark>X</mark> I	′			
Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transact Date (Month/Date)			ction	tion 2A. Deemed Execution Date, if any (Month/Day/Year)		quired, Disposed of, or Benefi 3. Transaction Code (Instr. 8) 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4)				A) or	or 5. Amount of Securities Beneficially Owned Following			6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership				
Common Stock 12/19/2			/200 7			Code	v	Amount 25,735 ⁽	(D)		Price	Tr (li	Reported Transaction(s) (Instr. 3 and 4)		D	(Instr. 4)			
Common Stock Common Stock							25,755** D		Ψ17.	33	9,220.77(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)	3A. Deem Execution if any (Month/D	n Date, ay/Year) -	4. Transa Code (8)	nstr.	5. Nu of Deriv Secu Acqu (A) of Dispo of (D) (Instr and 5	rative rities iired r osed) r. 3, 4	6. Date Expiration (Month/L	on Dat		Amo Secu Unde Deriv	Amo	ount nber	8. Price Derivat Securit (Instr. 5	ve deri / Sec) Ber Ow Foll Rep Trai	Number of rivative curities neficially vned llowing ported ansaction(s str. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)

Explanation of Responses:

- 1. Represents shares that were automatically withheld to cover tax withholding obligations in a transaction exempt under Rule 16b-3.
- 2. Number of shares includes 313,750 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) 20,000 performance shares are scheduled to vest in two equal annual installments beginning 8/31/08, (b) 168,750 performance shares are scheduled to vest in three equal annual installments beginning 12/19/08, and (c) provided specified performance goals are achieved, 125,000 performance shares are scheduled to vest no earlier than in four equal annual installments beginning 12/19/08 (all vesting is subject to continued employment).
- 3. Increased number of shares reflects 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, Attorney-in-Fact 12/21/2007

** 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 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-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 24th day of March, 2005.