FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washir

wasnington, D.C. 20549	OMB APPROVAL	
STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP	OMB Number:	3235-0

Estimated average burden 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

Name an <mark>Thakur</mark>	10% Owner	10% Owner	
(Last) C/O APP P.O. BOX	Other (specify below) nager	oelow)	
Street)	g Person	g Person	r Joint/Group Filing (Che n filed by One Reporting n filed by More than One on
(City)			
			ed
Title of S	r 5. Amount of Securities Form: Direct Obned Following Reported Reported Form: Direct Obned Following Reported Form: Direct Obned Following (I) (Instr. 4)		
	(Instr. 4)	(111501.4)	action(s) 3 and 4)
Common			B,461 ⁽²⁾ D
Common	By the 401(k) Plan	401(k)	07.62 ⁽³⁾ I
Title of Derivative Security Instr. 3)	ership of Indired Beneficia t (D) Ownersh direct (Instr. 4)	(D) Beneficia Ownershi irect (Instr. 4)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)
Derivative Security	vne rm rec Ind	vner orm: rect Indi	derivative Securities Beneficially Owned Following Reported Transaction(s)

Explanation of Responses:

- 1. Represents shares that were automatically withheld upon vesting of performance shares (restricted stock units) to cover tax withholding obligations in a transaction exempt under Rule 16b-3.
- 2. Number of shares includes 205,313 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) 19,687 performance shares are scheduled to vest on 12/19/09; (b) 39,376 performance shares are scheduled to vest in two equal annual installments beginning 12/19/10; and (c) provided specified performance goals are achieved, 146,250 performance shares are scheduled to vest no earlier than in three equal annual installments beginning 12/19/09 (all vesting is subject to continued employment).
- 3. Increased number of shares reflects periodic payroll acquisitions, 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, Attorney-in-Fact

12/23/2008

** 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.