Instruction 1(b)

FORM 5

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

Machinaton	$D \subset$	205/10
Washington,	D.C.	20549

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPROVAL								
l	OMB Number: 3235-0362								
l	Estimated average burden								
l	hours per response:	1.0							

Form 3	Holdings Repo	rted.												liou	13 pci	гезропас.	1.0
Form 4	Transactions F	eported.	File	ed pursuant to or Sectior					ities Excha ompany Ac								
1. Name and Address of Reporting Person* DE GEUS AART				2. Issuer Name and Ticker or Trading Symbol APPLIED MATERIALS INC /DE [AMAT]						5. Relationship of Reporti (Check all applicable) X Director				. ,	Issuer Owner		
		ERIALS, INC.	Middle)	3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 10/26/2008						Year)		Office below	er (give title v)	e	Otho belo	er (specify w)	
P O BOX 58039, 3050 BOWERS AVE, M/S 2023				4. If Amen	4. If Amendment, Date of Original Filed (Month/Day/Year)							Individual or Joint/Group Filing (Check Applicable Line)					
(Street) SANTA CLARA CA 95054												X		n filed by O n filed by M on			
(City)	(Sta	ate) (2	Zip)														
		Table	e I - Non-Deriv	ative Sec	uritie	s Ac	quire	d, Dis	sposed (of, or	Benefici	ally	Owne	ed			
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Year)			Execution Date, if any		3. Transaction Code (Instr. 8) 4. Securities Acquire Of (D) (Instr. 3, 4 and			or Disposed	Securiti Benefic		es Ow		ership n: Direct	7. Nature of ndirect Beneficial Ownership			
				(MONUNDAY)	lear, o,			Amoui	nt	(A) or (D)	Price		Issuer's Fiscal Year (Instr. 3 and 4)			ect (I)	(Instr. 4)
Common	Common Stock										20,000(1)		000(1)		D		
		Ta	ble II - Derivat (e.g., pı	ive Securi uts, calls,								y O	wned				
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. Transaction Code (Instr. 8)	5. Num of Deriv Secum Acqu (A) or Dispo of (D) (Instr. and 5	rative rities ired r osed . 3, 4	Expiratio (Month/D		te Exercisable and ration Date th/Day/Year) Expiration cisable Date		e and int of ities lying ative ity (Instr. 3			9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	lly	10. Ownershi Form: Direct (D) or Indirec (I) (Instr. 4	Beneficial Ownership t (Instr. 4)

Explanation of Responses:

1. This voluntary Form 5 is being filed solely to reflect the vesting of 5,000 performance shares (restricted stock units) on 7/23/08, which vesting is exempt from reporting pursuant to Rule 16a-3(f)(1)(i)(B). Upon vesting, these performance shares became outstanding shares of Applied Materials, Inc. common stock held directly by the reporting person. Shares shown as beneficially owned include 15,000 performance shares 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 in three equal annual installments beginning 7/23/09 (subject to continued service as a director through each vesting date).

/s/ Charmaine Mesina, Attorney-in-Fact 10/31/2008

Date

** 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.

POWER OF ATTORNEY

The undersigned hereby constitutes and appoints each of Charmaine Mesina and Matt Pera, 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 a director 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 23rd day of July, 2007.