FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington,	D.C.	20549

Check this box if no longer subject to Section 16. Form 4 or Form 5	STATEMENT OF CHAN
obligations may continue. See Instruction 1(b).	Filed pursuant to Section

IGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

Name and Address of Reporting Person* Sweeney Joseph J					2. Issuer Name and Ticker or Trading Symbol APPLIED MATERIALS INC /DE [AMAT]											tionship of Reportin all applicable) Director Officer (give title below)		ng Person(s) to Issu 10% Owi Other (sp below)		wner (specify		
	Last) (First) (Middle) C/O APPLIED MATERIALS, INC. P.O. BOX 58039, 3050 BOWERS AVE M/S 2023					3. Date of Earliest Transaction (Month/Day/Year) 09/06/2006										Sr. VP, GC & Corp. Secretary						
(Street) SANTA (CLARA CA		95054 Zip)		Line)																	
		Tabl	e I - Noi	n-Deriv	ative	Se	curitie	s Acc	uired,	Dis	posed o	f, o	r Ben	efici	ally (Owne	ed					
			2. Transaction Date (Month/Day/Year)		ur) l	2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5)				4 and Sed Bei Ow		ount of ties cially d Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)			
									Code	v	Amount	mount (A) or (D)		Price	e		action(s) 3 and 4)			(11150.4)		
Common	Stock			09/06	5/200E				F		1,073(1)	D	\$1	6.9	29),093 ⁽²⁾		D			
Common	Stock															8,196.69 ⁽³⁾ I 40				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)	3A. Deemed Execution Di if any (Month/Day/	Date, Transa Code (of Derive Secue Acque (A) or Disposof (D) (Instr	of		on Dat	ear)	7. Title and Amount of Securities Underlying Derivative Security (Inst and 4)		ount	Deriv	rivative	9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)		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	of e Sha	ares								

Explanation of Responses:

- 1. Represents shares that were automatically withheld to cover tax withholding obligations in a transaction exempt under Rule 16b-3.
- 2. Increased number of shares reflects (a) periodic payroll acquisitions under Employees' Stock Purchase Plan that are exempt under Rule 16a-10 and Rule 16b-3 and (b) 9,000 performance shares (or 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 immediately upon vesting, which vesting is scheduled to occur in three equal annual installments (assuming continued employment).
- 3. Increased number of shares reflects periodic payroll acquisitions under 401(k) Plan that are exempt under Rule 16b-3.

/s/ Joseph J. Sweeney

** Signature of Reporting Person Date

09/08/2006

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.