APPLIED MATERIALS INC /DE Form S-8 POS February 23, 2010

As filed with the Securities and Exchange Commission on February 23, 2010

Registration No. 333-143377

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 2 TO FORM S-8 REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

APPLIED MATERIALS, INC.

(Exact name of registrant as specified in its charter)

Delaware 94-1655526

(State or other jurisdiction of

(I.R.S. Employer

incorporation or organization)

Identification No.)

3050 Bowers Avenue, P.O. Box 58039, Santa Clara, California 95052-8039

(Address of Principal Executive Offices) (Zip Code)

APPLIED MATERIALS, INC. EMPLOYEES STOCK PURCHASE PLAN

(Full title of the plan)

Joseph J. Sweeney

Applied Materials, Inc.

3050 Bowers Avenue, P.O. Box 58039, Santa Clara, California 95052-8039

(Name and address of agent for service)

Telephone number, including area code, of agent for service: (408) 727-5555

Copy to:

John E. Aguirre, Esq.

Wilson Sonsini Goodrich & Rosati, PC

650 Page Mill Road

Palo Alto, California 94304

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Securities Exchange Act of 1934:

Large accelerated filer x Accelerated filer

Non-accelerated filer " (Do not check if a smaller reporting company)

Smaller reporting company

EXPLANATORY STATEMENT DEREGISTRATION OF A PORTION OF SHARES

Effective as of December 7, 2009, Applied Materials, Inc. (the Registrant) amended its Employees Stock Purchase Plan (the Plan) to decrease the number of shares of its common stock (Shares) that is available for issuance under the Plan by 5,000,000 Shares. Accordingly, the purpose of this Post-Effective Amendment No. 2 to the Registrant s Registration Statement on Form S-8 (Commission File No. 333-143377), which was originally filed on May 30, 2007 and amended by Post-Effective Amendment No. 1 thereto filed on July 27, 2009 (the Registration Statement), is to reduce the number of Shares previously registered for issuance under the Plan pursuant to the Registration Statement (which number was 67,000,000) by 5,000,000 Shares that remain unsold. As a result, the Registration Statement now covers a maximum of 62,000,000 Shares.

Except to the extent specified above, the Registration Statement as previously filed is not amended or otherwise affected by this Post-Effective Amendment No. 2 thereto.

Signatures

THE REGISTRANT

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 2 to Registration Statement on Form S-8 (Commission File No. 333-143377) to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Clara, State of California on the 23rd day of February, 2010.

APPLIED MATERIALS, INC.

(Registrant)

By /s/ Michael R. Splinter Michael R. Splinter

President, Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 2 to Registration Statement on Form S-8 (Commission File No. 333-143377) has been signed by the following persons in the capacities and on the dates indicated.

Signature Title Date Principal Executive Officer: /s/ MICHAEL R. SPLINTER President, Chief Executive Officer February 23, 2010 Michael R. Splinter Principal Financial Officer: /s/ George S. Davis Executive Vice President, Chief Financial Officer February 23, 2010 George S. Davis Principal Accounting Officer: /s/ YVONNE WEATHERFORD Corporate Vice President, Corporate Controller February 23, 2010 Yvonne Weatherford

	tors	

*	Chairman of the Board	February 23, 2010
Michael R. Splinter		
*	Director	February 23, 2010
Aart J. de Geus		
*	Director	February 23, 2010
Stephen R. Forrest		
*	Director	February 23, 2010
Philip V. Gerdine		
*	Director	February 23, 2010
Thomas J. Iannotti		
*	Director	February 23, 2010
Susan M. James		
*	Director	February 23, 2010
Alexander A. Karsner		
*	Director	February 23, 2010
Gerhard H. Parker		
*	Director	February 23, 2010
Dennis D. Powell		
*	Director	February 23, 2010
Willem P. Roelandts		
*	Director	February 23, 2010
James E. Rogers		
*	Director	February 23, 2010
Robert H. Swan		

* By /s/ Joseph J. Sweeney Joseph J. Sweeney

Attorney-in-Fact**

** By authority of the Power of Attorney of Directors filed as Exhibit 24.1 to this Post-Effective Amendment No. 2 to Registration Statement on Form S-8 (Commission File No. 333-143377).

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EXHIBIT INDEX

- 4.1 Applied Materials, Inc. Employees Stock Purchase Plan (amended and restated effective as of February 23, 2010).
- 24.1 Power of Attorney of Directors.