As filed with the Securities and Exchange Commission on June 10, 2004

Registration No. 333-71245

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 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 (State or other jurisdiction of incorporation or organization) 94-1655526 (I.R.S. Employer Identification No.)

3050 Bowers Avenue, P.O. Box 58039, Santa Clara, California 95052-8039 (Address of Principal Executive Offices) (Zip Code)

APPLIED MATERIALS, INC. EMPLOYEE STOCK INCENTIVE PLAN (Formerly named the "Applied Materials, Inc. 1995 Equity Incentive 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

EXPLANATORY STATEMENT

This Post-Effective Amendment No. 1 to Registration Statement No. 333-71245 on Form S-8 is being filed by Applied Materials, Inc. to reflect the change in the name of the Applied Materials, Inc. 1995 Equity Incentive Plan (the "Plan"). Effective as of January 29, 2004, the Plan was renamed the "Applied Materials, Inc. Employee Stock Incentive Plan."

TABLE OF CONTENTS

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE ITEM 4. DESCRIPTION OF SECURITIES ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED ITEM 8. EXHIBITS ITEM 9. UNDERTAKINGS Signatures EXHIBIT 5.1 EXHIBIT 5.1

Table of Contents

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents are incorporated by reference in this registration statement: (i) the latest annual report of Applied Materials, Inc. (the "Registrant") filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); (ii) all other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the annual report referred to in clause (i) above (other than any Current Reports on Form 8-K containing Regulation FD disclosure furnished under Item 9 or Results of Operations and Financial Condition disclosure furnished under Item 12 and exhibits relating to such disclosures, unless otherwise specifically stated in such Current Reports on Form 8-K); and (iii) the description of the Registrant's common stock set forth in the Registrant's Registration Statement on Form 8-A relating thereto, including any amendment or report filed for the purpose of updating such description. All documents subsequently filed by the Registrant on or after the date of this registration statement pursuant to Sections 13(a), 13(c), 14, and

15(d) of the Exchange Act and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or deregisters all securities then remaining unsold (other than any Current Reports on Form 8-K containing Regulation FD disclosure furnished under Item 9 or Results of Operations and Financial Condition disclosure furnished under Item 12 and exhibits relating to such disclosures, unless otherwise specifically stated in such Current Reports on Form 8-K), shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

ITEM 4. DESCRIPTION OF SECURITIES

Inapplicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Inapplicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law (the "Delaware Law") authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended. The Registrant's Certificate of Incorporation provides for indemnification of the Registrant's directors, officers, employees and other agents to the maximum extent permitted by Delaware Law. In addition, the Registrant has entered into indemnification agreements with its directors and certain of its officers.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Inapplicable.

Table of Contents

ITEM 8. EXHIBITS

- 4.1 Applied Materials, Inc. Employee Stock Incentive Plan, as amended (formerly named the "Applied Materials, Inc. 1995 Equity Incentive Plan") (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement filed on February 17, 2004, Commission File No. 0-6920).
- 5.1 Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
- 23.1 Consent of Independent Registered Public Accounting Firm.
- 23.2 Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation is included in Exhibit 5.1 to this Registration Statement.
- 24.1 Power of Attorney of Directors (incorporated by reference to Exhibit 24.1 to the Registrant's Registration Statement No. 333-71245 on Form S-8 filed on January 27, 1999).

ITEM 9. UNDERTAKINGS

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

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. 1 to Registration Statement No. 333-71245 on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Clara, State of California on the 10th day of June, 2004.

APPLIED MATERIALS, INC. (Registrant)

/s/ Michael R. Splinter

Michael R. Splinter President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to Registration Statement No. 333-71245 on Form S-8 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 and Chief Executive Officer	June 10, 2004
Michael R. Splinter		
Principal Financial Officer:		
/s/ Joseph R. Bronson	Executive Vice President and Chief Financial Officer	June 10, 2004
Joseph R. Bronson		
Principal Accounting Officer:		
/s/ Nancy H. Handel	Group Vice President, Deputy Chief Financial Officer and Corporate Controller	June 10, 2004
Nancy H. Handel		
	5	

Table of Contents

*	Chairman of the Board	June 10, 2004
James C. Morgan		
*	Director	June 10, 2004
Michael H. Armacost		
*	Director	June 10, 2004
Deborah A. Coleman		
*	Director	June 10, 2004
Herbert M. Dwight, Jr.		
*	Director	June 10, 2004
Philip V. Gerdine		
*	Director	June 10, 2004
Paul R. Low		
*	Director	June 10, 2004
Dan Maydan		
	Director	June, 2004
Steven L. Miller		
Gerhard H. Parker	Director	June, 2004
	Director	June, 2004
Willem P. Roelandts		
	Director	June, 2004
Michael R. Splinter		

Representing a majority of the members of the Board of Directors.

*By /s/ Joseph R. Bronson

Joseph R. Bronson Attorney-in-Fact**

** By authority of the Power of Attorney of Directors filed as Exhibit 24.1 to this Registration Statement.

EXHIBIT INDEX

- 4.1 Applied Materials, Inc. Employee Stock Incentive Plan, as amended (formerly named the "Applied Materials, Inc. 1995 Equity Incentive Plan") (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement filed on February 17, 2004, Commission File No. 0-6920).
- 5.1 Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
- 23.1 Consent of Independent Registered Public Accounting Firm.
- 23.2 Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation is included in Exhibit 5.1 to this Registration Statement.
- 24.1 Power of Attorney of Directors (incorporated by reference to Exhibit 24.1 to the Registrant's Registration Statement No. 333-71245 on Form S-8 filed on January 27, 1999).

June 10, 2004

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

Re: Post-Effective Amendment No. 1 to Registration Statement No. 333-71245 on Form S-8

Ladies and Gentlemen:

At your request, we are rendering this opinion in connection with the proposed issuance of an aggregate of 72,000,000 shares of common stock (as adjusted for stock splits) of Applied Materials, Inc., a Delaware corporation (the "Company") and related options pursuant to the Applied Materials, Inc. Employee Stock Incentive Plan, as amended (formerly named the "Applied Materials, Inc. 1995 Equity Incentive Plan") (the "Plan").

We have examined instruments, documents, and records which we deemed relevant and necessary for the basis of our opinion hereinafter expressed. In such examination, we have assumed the following: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; and (c) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed.

Based on such examination, we are of the opinion that the 72,000,000 shares of common stock to be issued by the Company pursuant to the Plan are validly authorized shares of Common Stock and, when issued in accordance with the provisions of the Plan, will be legally issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to this Post-Effective Amendment No. 1 to Registration Statement No. 333-71245 on Form S-8 (the "Post-Effective Amendment") and to the use of our name wherever it appears in the Post-Effective Amendment. In giving such consent, we do not consider that we are "experts" within the meaning of such term as used in the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission issued thereunder, with respect to any part of the Post-Effective Amendment, including this opinion, as an exhibit or otherwise.

Very truly yours,

/s/ WILSON SONSINI GOODRICH & ROSATI, PC

WILSON SONSINI GOODRICH & ROSATI, Professional Corporation

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated November 12, 2003 relating to the financial statements and financial statement schedule of Applied Materials, Inc., which appear in the Company's Annual Report on Form 10-K for the year ended October 26, 2003.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

San Jose, California June 10, 2004