UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549
FORM 8-K
CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 22, 2005

Applied Materials, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 0-6920 (Commission File Number) 94-165526 (IRS Employer Identification No.)

3050 Bowers Avenue
P.O. Box 58039
Santa Clara, CA
(Address of principal executive offices)

95052-8039 (Zip Code)

Registrant s telephone number, including area code: (408) 727-5555

N/A

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- " Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On March 22, 2005, the Human Resources and Compensation Committee of the Board of Directors of Applied Materials, Inc. (Applied) approved the Nonemployee Director Share Purchase Plan (the Plan). The purpose of the Plan is to provide nonemployee members of Applied s Board of Directors (the Board) with a convenient method by which they may purchase shares of Applied s common stock (the Shares). Directors will pay 100% of fair market value for any Shares they purchase.

The Plan provides that, at least once annually, each nonemployee director will be given the opportunity to voluntarily elect to receive Shares in lieu of retainer fees and/or meeting fees that otherwise would be payable to them in cash for their service on the Board. Elections relate to fees that have not yet been earned by the director. Once the annual election is made, such election may not be changed or revoked for that year. Any fees that the participating director chooses to forego under the Plan will be converted into Shares based on the fair market value of a Share on the date of the Board or committee meeting for which the participating directors otherwise would be paid (or on the final day of a meeting that takes place over multiple days). Quarterly retainer fees will be converted into Shares based on the fair market value of a Share on the date of the regularly-scheduled quarterly meeting of the Board. However, for the first quarter in which the Plan is in effect (the second fiscal quarter of Applied s 2005 fiscal year), foregone fees will be converted into Shares based on the fair market value of a Share on April 8, 2005. Shares payable under the Plan will be fully vested and taxable.

Item 7.01 Regulation FD Disclosure.

On March 22, 2005, Applied s Board declared a quarterly cash dividend of \$0.03 per share and approved a new stock repurchase program authorizing the purchase of up to \$4.0 billion of Applied stock over the next three years ending March 2008. With the adoption of this new stock repurchase program, the \$3.0 billion stock repurchase program authorized in March 2004 was terminated.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits.

Exhibit No.	Description
99.1	Press Release issued by Applied Materials, Inc. dated March 23, 2005.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Applied Materials, Inc.

(Registrant)

Dated: March 23, 2005

By: /s/ Joseph J. Sweeney

Joseph J. Sweeney

Group Vice President

Legal Affairs and Intellectual Property

and Corporate Secretary

EXHIBIT INDEX

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