

**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): December 15, 2006

Applied Materials, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-06920
(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 5.02. Departures of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(e) As announced by Applied Materials, Inc. (“Applied”) on August 15, 2006, Nancy H. Handel, Applied’s Senior Vice President, Finance and former Chief Financial Officer, will retire effective January 5, 2007. On December 15, 2006, Applied entered into a formal separation agreement (the “Agreement”) with Ms. Handel. If Ms. Handel does not revoke her consent to the Agreement, it will become effective seven days following December 15, 2006.

Under the Agreement, Ms. Handel will continue as an employee of Applied as Senior Vice President, Finance, and will continue receiving her current salary through January 5, 2007. Ms. Handel will provide such other services and cooperate with Applied to facilitate the transition of her duties and responsibilities. Pursuant to a consulting agreement entered into simultaneously with the Agreement, Ms. Handel will provide consulting services of up to five days per month during the period from January 6, 2007 through January 6, 2008 and will be entitled to receive a fee of \$10,000 per month for such services.

In connection with Ms. Handel’s entrance into the Agreement in anticipation of her retirement, Ms. Handel will receive \$687,500 on each of December 15, 2006 (or, if later, within two business days following the date the Agreement becomes effective) and January 5, 2007, provided that she continues to provide the requested services through January 5, 2007. In addition, on December 22, 2006 (or, if later, within two business days following the date the Agreement becomes effective), Ms. Handel will receive a lump sum payment of \$692,010, the amount she earned under Applied’s Senior Executive Bonus Plan.

As of Ms. Handel’s January 5, 2007 retirement date, she will cease to vest in any performance shares she holds, and the unvested performance shares will terminate. As of her retirement date, Ms. Handel will receive the same accelerated vesting on her outstanding stock options that she would have received under the terms of Applied’s equity plans and the applicable option agreements had she retired with her current years of service but at an age of 60. As a result, on Ms. Handel’s retirement date, 100% of the shares subject to her outstanding options that would have vested had she continued employment through January 31, 2008 will immediately vest, and 50% of the shares subject to her options that would have vested had she continued employment from February 1, 2008 through January 31, 2009 will immediately vest. In addition, all of Ms. Handel’s outstanding options will remain outstanding and exercisable until the earlier of (i) the expiration of the applicable option’s maximum term or (ii) December 31, 2007.

The Agreement provides a general release in favor of Applied, as well as continued confidentiality and non-disparagement obligations by Ms. Handel.

Ms. Handel will be eligible to participate in Applied’s Bridge to Medicare Plan as provided under, and in accordance with, the terms of the plan applicable to Applied’s other employees. Ms. Handel also will be eligible to elect continued health care coverage in accordance with COBRA.

SIGNATURES

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)

Date: December 21, 2006

By: /s/ Joseph J. Sweeney
Joseph J. Sweeney
*Senior Vice President,
General Counsel and
Corporate Secretary*