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): October 23, 2006

Applied Materials, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction

000-06920 (Commission File Number) 94-1655526 (IRS Employer

of incorporation)

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 Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers.

(c) Appointment of a Principal Officer.

On October 23, 2006, the Board of Directors of Applied Materials, Inc. (Applied) appointed George S. Davis as Chief Financial Officer, effective Wednesday, November 1, 2006, the first week of fiscal year 2007. Mr. Davis, age 49, had been head of Corporate Business Development, with responsibility for merger and acquisition activities, strategic planning, and management of Applied s venture investments, since February 2005. From November 1999 to February 2005, Mr. Davis served as Corporate Treasurer. In that position, Mr. Davis was responsible for managing Applied s global treasury and tax activities. Prior to joining Applied, Mr. Davis served as Vice President of Finance, Europe, Middle East and Africa, for Atlantic Richfield Company, an oil exploration, production and refining company.

Mr. Davis will succeed Nancy H. Handel, who has served as Chief Financial Officer since 2004. Ms. Handel, who previously announced her intention to retire, will remain at Applied through January 5, 2007 and will assist Mr. Davis in his transition.

Applied has not entered into an employment agreement with Mr. Davis.

In June 2002, in order to assist with his relocation and pursuant to Applied s Employee Financial Assistance Plan, Applied granted to Mr. Davis an interest-free loan in the amount of \$500,000 for a term of five years. In October 2006, Mr. Davis fully repaid the loan before its due date and prior to his appointment as Chief Financial Officer.

A copy of the press release announcing the appointment of Mr. Davis is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release issued by Applied Materials, Inc. dated October 24, 2006.

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: October 24, 2006

By: /s/ Joseph J. Sweeney
Joseph J. Sweeney

Senior Vice President, General Counsel

and Corporate Secretary

EXHIBIT INDEX

Exhibit No. Description

99.1 Press Release issued by Applied Materials, Inc. dated October 24, 2006.