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): June 20, 2007

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 Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) On June 20, 2007, Farhad Moghadam, Senior Vice President, General Manager Thin Films Product Business Group and Foundation Engineering, announced his intention to resign from Applied Materials, Inc. (Applied).

Item 7.01 Regulation FD Disclosure.

On June 20, 2007, Applied issued a press release announcing the creation of a new Silicon Systems Group and Dr. Moghadam s intention to resign. A copy of the press release is attached hereto as Exhibit 99.1.

The information in this Item 7.01, including the exhibit, is furnished and shall not be deemed filed for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liabilities under that section, and shall not be deemed to be incorporated by reference into the filings of Applied under the Securities Act of 1933, as amended, regardless of any general incorporation language in such filings.

Item 8.01 Other Events.

On June 19, 2007, the Board of Directors of Applied appointed Robert H. Brust, a current member of the Audit Committee, as Chairman of the Audit Committee, effective immediately. Mr. Brust replaces Philip V. Gerdine, who has provided significant and valuable contributions since his appointment as Chairman of the Audit Committee in 1976. Dr. Gerdine will continue to serve as a member of the Board of Directors and of the Audit Committee.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 Press Release issued by Applied Materials, Inc. dated June 20, 2007.

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: June 20, 2007 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 June 20, 2007.