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 14, 2004

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))
7	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240 13e-4(c))

Item 7.01. Regulation FD Disclosure.

On December 14, 2004, Applied Materials, Inc. (the Company) issued a press release, the text of which is attached hereto as Exhibit 99.1.

The information in this Current Report on Form 8-K, 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 the liabilities under that Section, and shall not be deemed to be incorporated by reference into the filings of the Company under the Securities Act of 1933, as amended, regardless of any general incorporation language in such filings.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits

Exhibit No. Description

99.1 Press Release issued by Applied Materials, Inc. dated December 14, 2004.

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)

Date: December 14, 2004

By: /s/ JOSEPH J. SWEENEY

Joseph J. Sweeney Group Vice President Legal Affairs and Intellectual Property and Corporate Secretary **Exhibit Index**

Exhibit No. Description

99.1 Press Release issued by Applied Materials, Inc. dated December 14, 2004.

Release: Immediate

Contact: Dave Miller Betty Newboe Paul Bowman

> (business media) (technical media) (financial community) 408/563-9582 408/563-0647 408/563-1698

Applied Materials Completes Acquisition of Metron Technology

SANTA CLARA, Calif., December 14, 2004 — Applied Materials, Inc. announced today that it has completed the acquisition of the operating subsidiaries and businesses of Metron Technology N.V., the world's largest independent service provider to the semiconductor industry. The acquisition expands Applied Materials' portfolio of solutions for streamlining customers' semiconductor fab operations and is a key part of the Company's future growth strategy.

Under terms of the agreement, originally announced on August 16, 2004, Applied Materials paid approximately \$85 million for all outstanding shares and equity equivalents of Metron Technology's worldwide operating subsidiaries and substantially all of its other assets, and has assumed certain Metron Technology liabilities.

"Metron Technology provides us with a significant opportunity for extending our service business," said Mike Splinter, president and CEO of Applied Materials. "This is the first time a leading equipment supplier will have the capability to deliver fab-wide services for semiconductor fab operations support. Through Metron Technology, we expect to bring increased value to our customers with customized, quality solutions that combine efficiency and reliability with our equipment and process expertise."

As a wholly-owned subsidiary reporting into Applied Global Services, Metron Technology will have the benefit of Applied Materials' technical expertise, global infrastructure, strong supplier network and financial resources. Metron Technology will operate as an impartial provider of services with appropriate systems to protect the intellectual property of Metron Technology's customers and suppliers.

"Metron Technology's equipment and fab solutions allow customers to focus on their core design and manufacturing strengths while reducing fab operating costs," said Werner Finsterbusch, newly appointed general manager of Metron Technology. "This acquisition enhances Metron Technology's global capabilities and resources to provide multi-vendor solutions on a worldwide scale and bring new efficiencies to customers."

This press release contains forward-looking statements relating to expected benefits from the acquisition of Metron Technology's businesses and subsidiaries, Applied Materials' growth opportunities and service capabilities, the adequacy of procedures to protect confidential information,

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and all other statements that are not historical facts. These forward-looking statements include the assumptions that underlie such statements and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those stated or implied, including but not limited to: the successful integration and performance of the acquired businesses; sustainability of demand in the semiconductor and semiconductor equipment industries, which is subject to many factors, including global economic conditions, demand for electronic products and semiconductors, and geopolitical uncertainties; the realization of synergies expected to result from the acquisition; Applied's ability to successfully and cost-effectively supply a broad range of equipment and service products and to support non-Applied Materials systems; Applied's ability to successfully execute its growth strategy; retention of key employees; and other risks described in Applied Materials' SEC filings. All forward-looking statements are based on management's estimates, projections and assumptions as of the date hereof and Applied Materials assumes no obligation to update this press release.

Applied Materials, Inc., headquartered in Santa Clara, California, (Nasdaq: AMAT) is the largest supplier of products and services to the global semiconductor industry. Applied Materials' web site is www.appliedmaterials.com.