

Mail Stop 3561

December 18, 2007

By U.S. Mail

Michael R. Splinter
President and Chief Executive Officer
Applied Materials, Inc.
3050 Bowers Avenue
Santa Clara, California 95054

**Re: Applied Materials, Inc.
Definitive 14A
Filed February 14, 2007
File No.000-06920**

Dear Mr. Splinter:

We have reviewed your response letter dated September 21, 2007 and have the following comments. Please respond to our comments by January 7, 2008 or tell us by that time when you will provide us with a response. If the comment requests revised disclosure in future filings, please confirm in writing that you will comply with the comments in your future filings and also explain to us how you intend to comply. We welcome any questions you may have about our comments or any other aspect of our review.

1. We note your response to our prior comment 6. Please provide us with a more detailed analysis of how disclosure of each target would result in competitive harm. For example, but without limitation, tell us specifically how disclosure of earnings per share, revenue growth and other strategic and financial performance measures would allow competitors to strategize in a manner potentially harmful to the company. In your response, please clarify how competitors are able to derive such information from the company's targets. In addition, please explain how a past year's targets would be predictive of your strategic plans in future years given the varying levels of difficulty for achievement of targets that the compensation committee could set from one year to the next. For each performance measure that you believe you have a basis to omit, please provide detailed analysis of how disclosure of the specific quantitative or

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qualitative measurement would result in competitive harm. Please refer to Instruction 4 to Item 402(b) of Regulation S-K and Question 3.04 of Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov.

2. While we note your detailed response to our comments, please confirm that you will provide the additional and/or enhanced information included in your responses in your future filings.

Please contact me at (202) 551-3315 with any questions.

Sincerely,

Hanna T. Teshome
Special Counsel

cc: via facsimile (408) 748-5119
Joseph J. Sweeney
Senior Vice President, General Counsel
And Corporate Secretary