



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Mail Stop 6010

June 6, 2008

Mr. Larry A. Viano  
Chief Financial Officer  
Semitool, Inc.  
655 West Reserve Drive  
Kalispell, Montana 59901

**Re: Semitool, Inc.**  
**Form 10-K for the Fiscal Year Ended September 30, 2007**  
**File No. 000-25424**

Dear Mr. Viano:

We have reviewed your response letter dated May 22, 2008 and have the following additional comments. Where indicated, we think you should revise your future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspects of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended September 30, 2007

Note 1. Company Organization and Summary of Significant Accounting Policies, page 39

-Revenue Recognition, page 41

1. We note your response to prior comment 1. In the first sentence of your response, you state that you record 100% of the accounts receivable and the related deferred revenue upon transfer of ownership on all transactions. However, your response to the second bullet point and your disclosures in the Form 10-K suggest that when you sell existing

products into existing customer environments, you bifurcate revenue in accordance with EITF 00-21 and recognize as revenue the lesser of the fair value of the equipment or the contracted amount due or payable upon title transfer. Please reconcile these statements for us by clarifying when you recognize revenue on sales of existing products into existing customer environments.

2. You state here that your product sales generally contain substantive customer acceptance provisions. In response to prior comment 1, you also state that “typically...the agreement does not provide for the customer to return the equipment.” Please explain to us and revise future filings to disclose the specific terms of the acceptance provisions, including the remedies available to the customer in the event acceptance does not occur.
3. Further to the above, we note your statement in the response to the second bullet point in prior comment 1 that you believe that acceptance of your equipment is probable and substantially within your control. In light of this assertion, as well as your statement that the customer does not have a right to return the equipment, and as we note that you defer revenue on these products, please explain to us in detail the contract terms and any specific facts and circumstances that led to your conclusion to defer of revenue on these products. Clarify for us how, as you indicate in your response, you considered the guidance in SAB Topic 13A.3.b Question 2 in reaching that conclusion.

Other

4. We note that you did not provide the three acknowledgements requested in our previous comment letter dated April 29, 2008. As such, we have repeated the acknowledgements in this comment letter as noted below. Please include your acknowledgements in your response letter which addresses our comment above.

\*\*\*\*\*

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a response letter that keys your responses to our comment and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement

Mr. Larry A. Viano  
Semitool, Inc.  
June 6, 2008  
Page 3

from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn  
Accounting Branch Chief