



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

November 25, 2008

VIA U.S. MAIL AND FAX (408) 731-1893

James W. Sullivan
Chief Financial Officer
Mosys, Inc.
755 N. Mathilda Avenue, Suite 100
Sunnyvale, California 94085

Re: Mosys, Inc.
Form 10-K for the year ended December 31, 2007
Filed March 17, 2008
File No. 000-32929

Dear Mr. Sullivan:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is 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 information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Year Ended December 31, 2007

Financial Statements, page 50

Note 1. The Company and Summary of Significant Accounting Policies, page 54

Revenue Recognition, page 56

Royalty, page 58

1. We note from your disclosure that in 2006 you began recognizing revenue from two types of prepaid royalties, pre-production royalties and post-production royalties, and the revenue related to both types of royalties is recognized upon execution of the related contract. Based on your disclosure it is unclear to us why you believe it is appropriate to recognize the revenue in its entirety upfront at execution of the contract in accordance with the guidance in SAB Topic 13A. Please provide us with the specific terms of your agreements with regards to these prepaid royalties and the amounts of related revenue you recognized in 2006 and 2007. Please cite the specific accounting guidance upon which you based your accounting.
2. In this regard, if material, please tell us how you considered the prepaid royalties as part of your Results of Operations discussion in Management's Discussion and Analysis. We note your current disclosure states that you generally recognize royalties in the quarter in which you receive the licensee's report.

Note 4. Asset Acquisitions, page 64

3. We note that one of the components of purchased intangible assets related to your 2007 asset purchases is an assembled workforce. Please tell us why you believe this allocation is appropriate based on the guidance in paragraph 39 of SFAS 141.

Form 10-Q for the Quarter Ended September 30, 2008

Note 1. The Company and Summary of Significant Accounting Policies, page 6

Investments, page 9

4. We note that as of September 30, 2008, you had classified \$8.3 million (net of \$0.9 million in unrealized losses) of your auction rate securities as long-term investments due to the disruption in the credit markets that resulted in widespread failed auctions. We also note that you used Level 3 inputs to measure the fair value of the auction rate securities because there has not been a successful auction since February 2008. Please address the following:

- Please note that paragraphs 32 and 33 of SFAS 157 require an entity to describe the inputs and the information used to develop those inputs for both recurring and nonrecurring fair value measurements using significant unobservable inputs (Level 3). Please explain to us in greater detail about the methodology and the assumptions you employed to measure the auction rate securities. Refer to FSP FAS 157-3 for further guidance. Further, please expand your disclosure to address our concern in future filings.
 - Also in this regard, please explain to us and expand your disclosure in future filings why the decline in the fair value of the auction rate securities has not been other-than-temporary. Refer to FSP FAS 115-1 for further guidance.
5. We note that approximately 36% of your cash equivalents and available for sale securities were measured based on level 2 inputs. Your discussion regarding the inputs used to measure fair value does not appear to be specific to your investments. Please tell us more about the inputs used, including how you obtain these inputs, what they represent and how you are able to corroborate these prices. For example, tell us and revise future filings to disclose if your level 2 assets were valued using models, other pricing methodologies or were directly or indirectly observable through correlation with market data.
6. In this regard, please consider revise your Critical Accounting Policies in future filings to discuss significant assumptions and estimates made by management in determining fair value.

Item 9A. Controls and Procedures, page 20

7. We note your disclosure that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures were effective “to ensure that information required to be disclosed by us in the reports filed or submitted by us with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms.” If you elect to include any qualifying language as to the effectiveness conclusion in your future filings, such language should include, at a minimum, but only if true, that your officers concluded that your disclosure controls and procedures are effective to ensure that information required to be disclosed by you in reports that you file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to your management, including your principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. See Exchange Act Rule 13a-15(e) for the complete definition of “disclosure controls and procedures.” Alternatively, if true, your disclosure could simply indicate that your officers determined that your “disclosure controls and procedures are effective”

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without any further qualifications or attempts to define those disclosure controls and procedures.

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and 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 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 Andri Boerman at (202) 551-3645 or Julie Sherman at (202) 551-3640 if you have questions regarding comments on the financial statements and related matters. Please contact Celia Soehner at (202) 551-3463 or Mary Beth Breslin at (202) 551-3625 if you have questions on other comments. In this regard, do not hesitate to contact me at (202) 551-3554.

Sincerely,

Angela Crane
Branch Chief