



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

January 14, 2009

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 letter dated December 18, 2008 and have the following comments. Where indicated, we think you should revise your future documents 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. Please refer to our prior comment 1. We note that in 2006 you recognized \$2.6 million from prepaid royalties consisting of several intellectual property arrangements. With regard to the pre-production prepaid royalties please address the following:
 - We note that you recognized revenue upon execution of license agreements. Please tell us the term of the license agreement as stated in the agreement and confirm to us that you recognized revenue upon delivery which does not occur for revenue recognition purposes until the license term begins. Please refer to SAB Topic 13.A.3.d.
 - Please tell us if you have any continuing involvement under the agreement, including, but not limited to, research and development activities, maintenance of any information used by the licensee during the license term, agreements to sell products, etc. Please refer to SAB Topic 13.A.3.f.
 - Tell us if the licensee is obligated to pay you any additional fees during the license term or if it is anticipated that the licensee will purchase any additional products under the license agreement.
2. With regard to your post-production prepaid royalties, please respond to the following:
 - If the prepaid royalties fees were, in fact, prepaid and relate to future royalty obligations please clarify why you believe it is appropriate to recognize the revenue prior to the culmination of the earnings process. Cite the specific GAAP guidance that supports your accounting.
 - With regards to the \$450,000 up-front payment, please tell us if you have had or will have any continuing involvement with the licensee and if so, how your revenue recognition is consistent with SAB Topic 13.A.3.f.
 - With regards to the \$500,000 up-front payment, it appears from your response that you have an ongoing obligation to develop and obtain silicon qualification. In light of this obligation, please specifically tell us how you determined it was appropriate to

recognize the revenue up-front based on the guidance of SAB Topic 13.A.3.f., noting footnote 36.

- We see your statement as part of your response to our prior comment 2 that “[You] classify post-production royalties within reported royalty revenues because the revenue is directly tied to the licensee’s use of [your] technology in their currently shipping commercial products.” Based upon this classification, it appears that post-production royalties would be recorded over the term of the agreements as earned, please tell us how this is consistent with your determination that the \$450,000 and \$500,000 should be recognized up-front.
3. Refer to our prior comment 2. We note that nearly 17% of the revenue was derived from prepaid royalties in 2006 and none in 2007. Please discuss, in future filings, significant components of revenue, any known trends or uncertainties, and significant increase or decrease on revenues. Please refer to Item 303(a)(3) of Regulation S-K. Consider providing further clarification regarding the nature of these fees in future filings. For example, consider explaining, as you did in your response that what you refer to as pre-production prepaid royalties are reported as license revenue because they are paid as part of the initial license fee and not with respect to products being produced by the licensee and that you classify post-production royalties within reported royalty revenues because the revenue is directly tied to licensees’ use of our technology in their currently shipping commercial products.

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 cover letter 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 responses to our comments.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3640 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Julie Sherman
Reviewing Accountant