

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

DIVISION OF CORPORATION FINANCE

Mail Stop 3030

October 8, 2009

Richard Bowers ASM International N.V. 3440 E. University Drive Phoenix, Arizona 85034

Re: ASM International N.V. Form 20-F Filed March 24, 2009 File No. 000-13355

Dear Mr. Bowers:

We have reviewed your filing 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.

As of December 18, 2007, we ceased paying royalties under certain..., page 11

1. Regarding your response to prior comment 1, please confirm that in future filings you will provide disclosure similar to the information contained in your response that explains (i) the specific circumstances under which you have ceased paying royalties to Applied Materials and (ii) all relevant actions that you and Applied Materials have taken, and continue to take, with regard to this particular royalty issue. For example, while we note from your response that you "...disclosed [that] notice was given..." by you to Applied Materials prior to stopping the royalty payments, your disclosure on page 11 does not reflect this fact and

Richard Bowers ASM International N.V. October 8, 2009 Page 2

investors may be unclear about the consequences. Finally, with regard to the fourth paragraph of your response, please also consider your periodic reporting obligations on Form 6-K, as appropriate.

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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. You may wish to provide us with marked copies of the amendment to expedite our review. 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.

Please contact Celia Soehner at (202) 551-3463 or me at (202) 551-3637 with any other questions.

Sincerely,

Jay Mumford Senior Attorney