



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

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

March 11, 2010

VIA U.S. MAIL and FACSIMILE

Mr. Alan Edrick
Chief Financial Officer
OSI Systems, Inc.
12525 Chadron Avenue
Hawthorne, CA 90250

RE: **OSI Systems, Inc.**
Form 10-K for the fiscal year ended June 30, 2009
Filed August 28, 2009
File No. 000-23125

Dear Mr. Edrick:

We have reviewed your response dated March 8, 2010 and have the following comment. Where indicated, we think you should revise your document in future filings in response to this comment. 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Exhibit 10.7

1. We note your response to our prior comment 1; however, we reissue the comment with respect to the requirement of Item 601(b)(10) that you file a complete version of the credit agreement, including all attachments. To the extent you

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believe, as indicated in footnote 1 to your supplemental response, that disclosure of the information in the attachments could result in substantial competitive harm, you may seek confidential treatment for that information pursuant to rule 24b-2 of the Exchange Act. For guidance on submitting such a request, please refer to Staff Legal Bulletin No. 1, available on our website at www.sec.gov. Select "Corporation Finance," then select "Compliance and Disclosure Interpretations" and then select "Confidential Treatment Requests."

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

You may contact Dennis Hult at (202) 551-3618 or Jay Webb, Reviewing Accountant, at (202) 551-3603 if you have any questions regarding comments on the financial statements. Please contact Louis Rambo at (202) 551-3289 or me at (202) 551-3625 if you have questions on any other comments.

Sincerely,

Mary Beth Breslin
Senior Attorney