

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

Mail Stop 6010

February 15, 2008

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

RE: OSI SYSTEMS, INC.

Form 10-K for the fiscal year ended June 30, 2007 Filed September 13, 2007

File No. 0-23125

Dear Mr. Edrick:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in future filings 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Alan Edrick OSI Systems, Inc. February 15, 2008 Page 2

Form 10-K for the year ended June 30, 2007 filed September 13, 2007

Notes to Consolidated Financial Statements, page F-8

Note 8 Impairment, Restructuring and Other Charges, page F-20

1. We note during fiscal 2007, as part of a global review of your operations, the Company assessed the value of certain technologies and product lines, which resulted in total impairment charges of \$31.8 million. In future filings, please revise your disclosure to describe the facts and circumstances leading to the impairment, consistent with paragraph 26(a) of SFAS 144. In this regard, it should be clear from the disclosure what caused you to test the assets for recoverability under paragraph 8 of SFAS 144.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that they have provided all information investors require. 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 filings;
- staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff 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.

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 with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

Alan Edrick OSI Systems, Inc. February 15, 2008 Page 3

You may contact Dennis Hult, Staff Accountant, at (202) 551-3618 or me at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kate Tillan Assistant Chief Accountant