



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

Mail Stop 3030

November 17, 2009

VIA U.S. MAIL and FACSIMILE (858) 385-7100

Paul B. Bowman
Senior Vice President and Chief Financial Officer
Cymer, Inc.
17075 Thornmint Court
San Diego, CA 92127

Re: Cymer, Inc.
Form 10-K for Fiscal Year Ended December 31, 2008
Filed February 27, 2009
Form 10-Q for the Quarterly Period Ended September 30, 2009
File No. 000-21321

Dear Mr. Bowman:

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.

Form 10-K for Fiscal Year Ended December 31, 2008

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 38

2008-Business and Economic Highlights, page 39

1. We reference the disclosure that you recorded charges of \$3 million in the three months ended December 31, 2008 due to an 8% reduction in your global workforce. To the extent that this is part of a restructuring plan, please tell us where you have provided the disclosures required by FASB ASC 420-10-50 (SFAS 146) and SAB Topic 5.P.4.

Controls and Procedures, page 63

2. We note that you refer to "disclosure controls and procedures" as defined in the Exchange Act but that your officers only concluded that your disclosure controls and procedures were effective "in ensuring that information required to be disclosed by [you] in reports that [you] file under the Exchange Act is recorded, processed, summarized and reported within the time period specified in the rules and forms of the Securities and Exchange Commission." In your future filings, also disclose whether your officers concluded that your disclosure controls and procedures are also effective to ensure that information required to be disclosed in the reports that you file or submit under the Exchange Act is accumulated and communicated to your management, including your chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure. Please note that this comment also applies to your effectiveness conclusions in your quarterly reports as well.

Form 10-Q for the Quarterly Period Ended September 30, 2009

Condensed Consolidated Statements of Cash Flows, page 6

3. We see that you reconcile net income (loss) attributable to Cymer, Inc. to net cash provided by (used in) operating activities. Under FASB ASC 230-10, a statement of cash flows prepared under the indirect method should start with "net income." FASB ASC 810-10-65-1 defines "net income" as net income attributable to both the controlling and noncontrolling interests. As such, in future filings please begin your consolidated statement of cash flows with "net income" as defined in FASB ASC 810-10-65-1. Please also note that "net income attributable to noncontrolling interests" should not be included as a reconciling item in the operating section of a consolidated cash flow statement.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 19

Nine months ended September 30, 2009 and 2008, page 29

Restructuring, page 31

4. Regarding the restructuring plan implemented in the first quarter of 2009, in future filings please provide quantified disclosure of the expected cost savings from the exit plans and identify the period when you expect to first realize those benefits. For guidance on MD&A disclosures about exit plans, please refer to SAB Topic 5-P.

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 understand that we may have additional comments after reviewing your 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.

Paul B. Bowman
Cymer, Inc.
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You may contact Kristin Lochhead, Staff Accountant, at (202) 551-3664 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Joe McCann at (202) 551-6262 or Tim Buchmiller at (202) 551-3635 if you have any other questions.

Sincerely,

Brian Cascio
Accounting Branch Chief