Via Facsimile and U.S. Mail Mail Stop 6010

October 30, 2008

Mr. Gregory Lucier Chairman and Chief Executive Officer Invitrogen Corporation 1600 Faraday Avenue Carlsbad, CA 92008

Re: Invitrogen Corporation Form 10-K for the Year Ended December 31, 2007 Filed February 15, 2008 File No. 000-25317

Dear Mr. Lucier:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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.

Form 10-K for the Year Ended December 31, 2007

Item 7. Management's Discussion and Analysis of financial Condition and Results

Market Risk

Foreign Currency Translation, page 41

1. You disclosed that international revenues represent 45% of total revenues in 2007 and are expected to be a significant percentage of your revenue in the future. Please disclose the amount of trade receivables and accounts payable

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> denominated in foreign currencies. If these amounts are significantly greater than your forward exchange contracts of \$27.3 million at December 31, 2007, disclose any unhedged foreign currency receivable and payable exposures at December 31, 2007. Please also provide a sensitivity analysis of the potential exposure to loss due to hypothetical changes in foreign currency exchange rates. Please refer to Item 305 of Regulation S-K.

Index to Exhibits, page 92

2. We note that you have not filed or incorporated by reference many of your management contracts and compensatory plans pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K. As a few examples, we note that you have not filed or incorporated by reference into this filing your employment agreements with your chief executive officer and chief financial officer, form of employment agreement for your other executive officers, change of control agreements, indemnification agreements, long term incentive plans and stock option plans. Please revise to file copies of all your agreements and plans that are required to be filed pursuant to pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides the requested information. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 your letter, 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.

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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 comment on your filing.

Please contact Kei Ino, Staff Accountant, at (202) 551-3659 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Jennifer Riegel, Staff Attorney at (202) 551-3575 or John Krug, Senior Staff Attorney at (202) 551-3862 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant