Via Facsimile and U.S. Mail Mail Stop 6010

January 8, 2008

Mr. David F. Hoffmeister SVP & Chief Financial Officer Invitrogen Corporation 1600 Faraday Ave. Carlsbad, CA 92880-2882

Re: Invitrogen Corporation Form 10-K for the Fiscal Year Ended December 31, 2006 Filed March 1, 2007 File No. 000-25317

Dear Mr. Hoffmeister:

We verbally communicated comments to the Company on the above captioned filing on October 15, 2007 via a phone conversation. In addition, we have made several attempts to contact the Company with regards to the status of its response. As of the date of this letter, these comments continue to remain outstanding and unresolved. The comments provided verbally on October 15, 2007 are repeated below.

Form 10-K for the year ended December 31, 2006

Critical Accounting Policies, page 37

Revenue Recognition, page 37

1. Refer to your response to our comment 1. We reviewed your proposed revised disclosure with regards to your revenue recognition policy however your response did not address the entire comment. Please provide to us a discussion that quantifies for us the amount of previously recognized revenue that was reversed for all periods presented and provide us an analysis under SAB 99 of these amounts.

Schedule II – Valuation and Qualifying Accounts, page 93

2. Refer to your response to comment 2. Please provide to us, in disclosure type format, a revised discussion related to the accrued merger and restructuring

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> related costs that includes the aggregated impact of these activities to be included under Note 2. Business Combinations in your notes to consolidated financial statements.

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 response to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

You may contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant