

Via Facsimile and U.S. Mail
Mail Stop 6010

March 9, 2007

Mr. Alan H. Buckey
Chief Financial Officer
LCA-Vision Inc.
7840 Montgomery Rd.
Cincinnati, OH 45236

**Re: LCA Vision Inc.
Form 10-K for Fiscal Year Ended December 31, 2006
File No. 0-27610**

Dear Mr. Buckey:

We have limited our review of your filing to the issue we have addressed in our comment. In our comment, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. 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 filings. 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.

You recognize revenue as services are performed. It does not appear that you defer any revenues. We understand that you have several different prices for procedures which may or may not include post-op exams, free enhancements for one year and free enhancements for life. Please provide us your analysis of why no revenue is required to be deferred because of the obligation to provide these services subsequent to the initial procedure. Please provide your analysis of supporting literature, including your consideration of, but not limited to, FASB Technical Bulletin 90-1 and EITF 00-21.

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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 provide the requested information. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

Mr. Kim D. Blickenstaff
Biosite Incorporated
August 1, 2006
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 filings or in response to our comments on your filings.

You may contact Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the comment. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant