

Mail Stop 6010

October 17, 2007

VIA U.S. MAIL AND FAX (650) 940-4710

Mr. Barry G. Caldwell
President and Chief Executive Officer
Iridex Corporation
1212 Terra Bella Avenue
Mountain View, California 94043

**Re: Iridex Corporation
Form 10-K for the year ended December 30, 2006
Filed March 30, 2007
File No. 000-27598**

Dear Mr. Caldwell:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your documents 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 or may not 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.

Form 8-K dated December 18, 2006

1. We noted that the investigation initiated by the Audit Committee concluded that you had prematurely recognized revenues and identified other errors related to revenue recognition during the period from the beginning of the fourth quarter of 2003 through the first quarter of 2006.
 - Tell us more about the errors identified as part of your investigation, including the amounts related to each error identified and the specific periods to which each error relates. In addition, tell us how management concluded these errors were not material to each related period and provide us with your SAB 99 analysis of such errors.
 - Tell us how you have considered SFAS 154 in your analysis of the required accounting, presentation and disclosure impact of the referenced adjustments.
 - In addition, tell us about your consideration of the guidance in SAB 108 in your analysis of the adjustments and reclassifications.

Form 10-K for the Year Ended December 31, 2006

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 40

Liquidity and Capital Resources, page 42

2. We note your disclosure that as part of the acquisition of the aesthetics business of AMS in January 2007 you have agreed to purchase up to \$9 million of certain inventory from AMS. Please tell us and expand your disclosure in future filings to further clarify your obligation, including how you calculated the \$1,472 obligation you included in the Contractual Obligations Table on page 43.

Financial Statements, page 48

Consolidated Statements of Operations, page 49

3. Based on disclosures in the filing it appears you generate revenues from both the sale of products and the provision of services. Please consider the impact of Rules 5-03(b)(1) and (2) of Regulation S-X on your disclosure requirements when preparing future filings.

Note 2. Summary of Significant Accounting Policies, page 53

Revenue Recognition, page 54

4. We note your disclosure that the company's sales may include post-sales obligations for training or other deliverables and that related revenues are recognized in accordance with EITF 00-21. Please tell us more about these post-sales obligations and clarify for us situations when you believe you would have objective and reliable evidence of fair value of undelivered items and when you would not in accordance with EITF 00-21 and your related accounting.

Form 10-Q for the period ending June 30, 2007

Financial Statements, page 1

Consolidated Statements of Operations, page 2

5. We noted that you included \$2.5 million related to a legal settlement as a component of other income (expense) in the three and six month period ended June 30, 2006. Further, we see from your disclosure on page 12 that this payment represents consideration for cross licensing of various patents between you and Synergetics. Please clarify why you believe your classification of this settlement as non-operating income is appropriate. Your explanation should include a discussion of why the patent and the underlying products related to the patent do not relate to your operating activities.

Note 3. Business Combination, page 8

6. We note the disclosure on page 9 that independent valuation experts assisted the company in determining the valuation of the intangible assets acquired. While in future filings management may elect to take full responsibility for valuing the equity instruments, if you choose to continue to refer to the expert in any capacity, please revise future filings, beginning with your next 10-Q, to name the independent valuation firm. In addition, please note that if you intend to incorporate your Form 10-Q by reference into any registration statement, you will be required to include the consent of the independent valuation firm as an exhibit to the registration statement.
7. We noted your disclosure on page 10 that the financial statements of the acquired business are not complete. Please advise us as to when you plan to file the financial statements and any pro forma information required by Item 9.01 of Form 8-K for your acquisition of the aesthetics business from American Medical Systems. We may have further comments upon obtaining such financial statements and pro forma information.

8. We noted your disclosure on page 20 of your 2006 Form 10-K for the year ended December 31, 2006 that “in addition, as part of [your] acquisition, [you] entered into agreements with Laserscope to obtain certain manufacturing support, administrative services and future intellectual property rights.” Please tell us more about this agreement, including the terms, related accounting and how you have disclosed this agreement in your Form 10-Q upon completion of the acquisition.

Note 10. Subsequent Events, page 14

9. We note your disclosure that you agreed to payments totaling approximately \$4.1 million in respect of certain inventory and service parts to be purchased from AMS following termination of the Product Supply Agreement. Please tell us how you have accounted for this transaction.

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 that keys your responses to our comments and provides any requested supplemental 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 filings to be certain that the filings 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 filings;
- Staff comments or changes to disclosure in response to 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.

Mr. Barry G. Caldwell
Iridex Corporation
October 17, 2007
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You may contact Julie Sherman, Staff Accountant, at (202) 551-3640, or me at (202) 551-3603 if you have questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Accounting Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant