September 5, 2007

Via U.S. Mail and Facsimile (650-940-4710)

Barry G. Caldwell President, Chief Executive Officer, and Director Iridex Corporation 1212 Terra Bella Avenue Mountain View, CA 94043-1824

Re: Iridex Corporation

Form 10-K for the Fiscal Year Ended December 31, 2005

Filed April 3, 2006 File No. 0-27598

Response Letter filed August 2, 2007

Dear Mr. Caldwell:

We have reviewed your response letter dated August 2, 2007 and we have the following comment. We welcome any questions you may have about our comment or on any other aspect of our review. Feel free to

call us at the telephone numbers listed at the end of this letter.

General

1. We note your response to comment 2 in our letter dated June 27, 2007. You have not provided us the information we requested in that $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right)$

comment. We reissue the comment.

If you are unable to provide the information requested by the comment

until after you have prepared the referenced Voluntary Self Disclosure, please so advise, and advise us of the approximate timeframe in which you will be able to respond to the comment.

* * * * *

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please file your response letter on EDGAR.

Please understand that we may have additional comments after we review your response to our comment. Please contact Pradip Bhaumik, Attorney-Advisor, at (202) 551-3333 if you have any questions about the comment or our review. You may also contact me at (202) 551-3470.

Sincerely,

Cecilia D. Blye, Chief Office of Global Security

Risk

cc: Peggy Fisher

Assistant Director
Division of Corporation Finance

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