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July 28, 2011

Via EDGAR and Overnight Courier

Mr. Paul A. BelvinMs. Cecilia Blye, Chief Office of Global Security RiskMs. Amanda Ravitz, Assistant Director, Division of Corporation FinanceUnited States Securities and Exchange Commission100 F Street, N.E.Washington, D.C. 20549

Re: IRIDEX Corporation Form 10-K for the Fiscal Year Ended January 1, 2011 Filed March 24, 2011 File No. 000-27598

Dear Mr. Belvin and Ms. Blye:

On behalf of IRIDEX Corporation ("we," the "Company," or "IRIDEX"), we submit this letter in response to comments from the staff of the Securities and Exchange Commission (the "Staff") received by letter dated June 29, 2011, relating to the Company's Form 10-K for the fiscal year ended January 1, 2011 (the "Form 10-K") filed on March 24, 2011.

In this letter, we have recited the comments from the Staff in italicized type and have followed each comment with the Company's response. Capitalized terms used but not defined herein shall have the meanings ascribed thereto in the Form 10-K.

1. Please update us on your contacts with Iran, Syria and Sudan, whether through distributors, resellers, affiliates, subsidiaries, or other direct or indirect arrangements, since your letters to us of February 28, 2007, April 30, 2007, August 2, 2007 and October 17, 2007. Describe to us the nature and extent of any past, current and anticipated contacts with those countries since your letters, including any products or services you have provided or anticipate providing, directly or indirectly, to the referenced countries, and any agreements, commercial arrangements, or other contacts you have had, or intend to have, directly or indirectly, with the governments or entities controlled by the governments of those countries.

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Response:

The Company is a leading worldwide provider of therapeutic based laser systems and delivery devices used to treat eye diseases in ophthalmology and skin conditions in dermatology. We sell internationally through approximately 100 independent distributors into 107 countries. Our customers are doctors, hospitals or healthcare practices. The Company has only engaged in the sale of Ophthalmology products and not Aesthetics products to Iran, Syria and Sudan. Our products are classified by the U.S. Department of Commerce as EAR99 (EAR99 items generally consist of low-technology consumer goods) and we obtain export licenses for any sales to Iran, Syria and Sudan prior to completing any such sales.

<u>Iran</u>: We have a distribution agreement with Iran Memco, based in Iran, who operates as our distributor for ophthalmology products in Iran. We have been working with Iran Memco since 2007. Our sales to Iran are as follows:

| Year | Sales | Description |
|----------|-----------|---|
| 2008 | \$101,480 | Qty 2: SLx Laser System; Qty 2: GLx Laser System |
| 2009 | \$ 0 | |
| 2010 | \$ 94,630 | Qty 1: IQ810 Laser System; Qty 77 boxes: EndoProbes |
| YTD 2011 | \$ 0 | |

We anticipate future business dealings to follow this pattern and to reflect this magnitude.

<u>Syria</u>: We have a working relationship but no formal distributor agreement with Pioneers for Medical Equipment, based in Syria, who operates as our distributor for ophthalmology products in Syria. We have been working with Pioneers for Medical Equipment since 2006. Our sales to Syria are as follows:

| Year | Sales | Description |
|----------|----------|---|
| 2008 | \$27,010 | Qty 1: SLx Laser System |
| 2009 | \$31,191 | Qty 2: SL Laser System |
| 2010 | \$23,090 | Qty 1: SL Laser System; Qty 7 boxes: EndoProbes |
| YTD 2011 | \$66,723 | Qty 1: IQ577 Laser System; Qty 1: IQ810 Laser Sytem; Qty 6 boxes: EndoProbes |

We anticipate future business dealings to follow this pattern and to reflect this magnitude.

Sudan: We do not have a distributor covering Sudan and have made no sales into Sudan during the last three fiscal years or during the subsequent interim period.

| Year | Sales |
|--------------|-------|
| Year 2008 | \$ 0 |
| 2009 | \$ 0 |
| 2010 | \$ 0 |
| YTD 2011 | \$ 0 |

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CTEQ Ltd, based in the United Kingdom, has approached us to act as a distributor for the sale of \$67,500 ophthalmology products (SLx and GLx Symphony system) to a doctor in Sudan. We have submitted an application for export but due to the Sudan license application backlog at OFAC we do not anticipate receiving approval in 2011 and, when and if we receive such an export license, we do not anticipate that sales into Sudan will be material to the Company.

2. Please discuss the materiality of your contacts with Iran, Syria or Sudan described in response to the foregoing comment and whether those contacts constitute a material investment risk for you security holders. You should address materiality in quantitative terms, including the approximate dollar amounts of any associated revenues, assets, and liabilities for the last three fiscal years and the subsequent interim period. Also, address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company's reputation and share value. Various state and municipal governments, universities, and other investors have proposed or adopted divestment or similar initiatives regarding investment in companies that do business with U.S.-designated state sponsors of terrorism. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that have operations associated with Iran, Syria and Sudan.

Our contacts with Iran, Syria or Sudan are not material in qualitative or quantitative terms and we do not consider these contacts a material investment risk for our security holders.

Our revenues for 2008, 2009, 2010 and the first quarter 2011 were \$48,528,000, \$43,212,000, \$43,694,000 and \$11,212,000, respectively. Aggregate sales to Iran, Syria and Sudan expressed in terms of a percentage of overall revenues were 0.26%, 0.07%, 0.27% and 0.60%, respectively, during 2008, 2009, 2010 and the first quarter 2011. In quantitative terms the contacts with Iran, Syria and Sudan are not material to the Company. Apart from the sales described above, the Company does not own any assets or liabilities associated with these countries.

Our sales in these countries are to doctors, hospitals or healthcare practices and our products have no material non-medical use. We sell medical devices that help save people's sight. We obtain prior U.S. government approval for all of our sales into Iran, Syria and Sudan in the form of an export license prior to completing any particular sale. Therefore we do not consider these corporate activities as having a negative impact on the company's reputation and or share value and we do not consider these contacts to be qualitatively material to investors wishing to avoid investment in companies that do business with U.S.-designated state sponsors of terrorism.

In connection with IRIDEX's responses to the Staff's comments, we acknowledge that we are responsible for the adequacy and accuracy of the disclosure in our filings with the Securities and Exchange Commission, Staff comments or changes to disclosure in response to Staff comments do not foreclose the Securities and Exchange Commission from taking any action with respect to such filings, and we may not assert Staff comments as a defense in any proceeding initiated by the Securities and Exchange Commission or any person under the federal securities laws of the United States.

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Please acknowledge receipt of this letter by stamping the enclosed duplicate of this letter and returning it to the undersigned in the envelope provided.

We would like to discuss these comments and responses at your earliest convenience. David J. Segre and Todd C. Carpenter, Esq. of Wilson Sonsini Goodrich & Rosati, Professional Corporation can be reached at (650) 493-9300, and I may be reached at (650) 962-8848 ext. 3016.

Sincerely,

/s/James H. Mackaness

James H. Mackaness IRIDEX Corporation Chief Financial Officer

cc: David J. Segre Todd C. Carpenter