



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Mail Stop 3030

April 23, 2009

VIA U.S. MAIL and FACSIMILE

Mr. John J. Stuart, Jr.  
Chief Financial Officer  
Irvine Sensors Corporation  
3001 Red Hill Avenue  
Costa Mesa, CA 92626

**RE: Irvine Sensors Corporation  
Form 10-K for the fiscal year ended September 28, 2008  
Filed January 12, 2009  
File No. 1-08402  
Form 10-Q for the quarterly period ended December 28, 2008  
Filed February 17, 2009**

Dear Mr. Stuart:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in future filings 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 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 filing. 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 10-K for the Fiscal Year Ended September 28, 2008

Consolidated Statements of Operations, page F-3

1. We note in fiscal 2008 you presented a \$315,600 gain on disposal of assets (unrelated to the Optex Asset Sale) as a non-operating item. We generally believe that gains and losses resulting from write-down or sale of assets previously used in operations should be classified as operating items in the income statement. This treatment appears consistent with the guidance prescribed by SFAS 144, as well. Accordingly, please tell us why you believe it was appropriate to classify these items in the non-operating section of your income statement.

Form 10-Q for the Quarterly Period Ended December 28, 2008

Financial Statements, page 3

Consolidated Balance Sheets, page 3

2. We see your presentation of prepaid and deferred stock-based compensation as contra equity accounts in your December 28, 2008 and September 28, 2008 balance sheets as well as the related statements of stockholders' equity (deficit). We note that Statement 123R requires compensation costs to be recognized in the financial statements as services are provided by employees and does not permit those costs to be recognized as deferred compensation on the balance sheet before services are provided. Refer to paragraph 74 of Statement 123R. Please tell us the authoritative accounting literature you relied upon when determining how to present amounts related to stock issued for prepaid and deferred stock-based compensation in your financial statements. Specifically tell us why you believe a contra equity account for unearned compensation resulting from the issuance of equity instruments is permitted under U.S. GAAP. Consider the impact of our comment when preparing future filings.

Note 9 – Intangible Assets, net, page 33

3. We see that in December 2008 you entered into a preliminary agreement to sell most of your patents. We noted from information in the Form 8-K filed March 24, 2009 that on March 18, 2009 you entered into a definitive agreement under which you sold, assigned, transferred, and conveyed to “the Purchaser” for \$8,500,000 all your rights, title, and interest in various patents. We also noted from the pro forma information included in the referenced Form 8-K it appears you plan to record the gain on the sale of the patents all in one quarterly accounting period (we assume your March 2009 quarter) and plan to present the

gain on the patents disposal as a non-operating item. Please address the following:

- please tell us the accounting period(s) in which you plan to record the gain on the sale of your patents. Please give us references to the authoritative U.S. GAAP you believe supports your conclusions. Please tell us in your response whether you retained any risks or rewards associated with the sold patents (including whether you could have any future obligations that result from the sold patents), whether the Purchaser is a related party and whether any of the purchase price is refundable;
- please tell us why you believe it would be appropriate to classify any gain on disposal of the patents in the non-operating section of your income statement.

Note 12 – Commitments and Contingencies, page 36

4. We see the various lawsuits outstanding that are disclosed in this Note. If it is at least reasonably possible that any unaccrued amount related to a contingency (if negatively resolved) could have a material negative impact on your financial statements, the notes to the financial statements must either disclose the range of possible loss or indicate no such estimate can be made. Refer to paragraph 10 of Statement 5. Please revise future filings to address our concerns.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 41

Results of Operations, page 49

Cost of Product Sales, page 51

5. We note the negative gross margins the company experienced with product sales in the quarter ended December 28, 2008. We also note you attribute the increase in cost of product sales as a percentage of total revenues to increased product support costs associated with thermal imaging products, “including both those delivered in a prior period and those to be shipped in future periods under an existing order for which revenues have not yet been recognized.” Please tell us and revise future filings to disclose what these product support costs are and how your accounting for them complies with U.S. GAAP. Please discuss why you incur and recognize these costs for products not yet shipped.

Form 8-K filed March 24, 2009

6. We see you presented a pro forma statement of operations in this filing that included an \$8.7 million pro forma adjustment for the gain on the disposal of patents. Please note that Article 11 of Regulation S-X only permits income statement pro forma adjustments for items that are recurring in nature. Note our concerns when preparing future filings.

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 with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your cover letter on EDGAR. 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 filing to be certain that the filing 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 comments 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.

John J. Stuart, Jr.  
Irvine Sensors Corporation  
April 23, 2009  
Page 5

You may contact Dennis Hult, Staff Accountant, at (202) 551-3618 or myself if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3603 with any other questions. In this regard, do not hesitate to contact Angela J. Crane, Accounting Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb  
Reviewing Accountant