

Mail Stop 6010

June 13, 2008

Elias Vamvakas  
Chairman of the Board  
OccuLogix, Inc.  
2600 Skymark Avenue, Unit 9, Suite 201  
Mississauga, Ontario L4W 5B2

**Re: OccuLogix, Inc.  
Preliminary Proxy Statement on Schedule 14A  
Filed May 20, 2008  
Form 10-K for the fiscal year ended December 31, 2007  
Filed March 13, 2008  
File No. 0-51030**

Dear Mr. Vamvakas:

We have limited our review of your preliminary proxy statement to those issues we have addressed in our comments, and we have also conducted a financial statement review of your Form 10-K. 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 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.

General

1. When you file an amendment, please include the Schedule 14A cover page.
2. In an appropriate location, please disclose the number of shareholders of OcuSense. Supplementally furnish your basis for not registering the shares to be issued in this transaction.

Summary Term Sheet, page 3

3. Disclose why you are proposing this transaction at this time.
4. Disclose how the merger consideration was determined and the factors management considered in recommending that investors vote for this transaction.
5. Disclose in plain English all interests of management, and quantify benefits that members of management will receive including, for example, severance benefits.

Information about this proxy material and voting, page 7

6. Include under a separate caption the interests of management, and quantify the benefits management will derive from all the proposals. Disclose all related party transactions including, for example, the relationship of Mr. Vamvakas with Marchant, and quantify all fees and other payments to be made to Marchant. We may have further comments.

Votes Required to Approve Each Proposal, page 11

7. Expand to disclose whether the registrant is aware of the intent of its major shareholders and members of management to vote for this transaction and whether any parties entered into any agreements regarding their votes. Tell us whether major shareholders of OccuLogix are also shareholders in OcuSense and how their percentage interest in OccuLogix will change as a result of these transactions.

Election of Directors, page 13

8. Disclose that Mr. Vamvakas has been on the board of directors of OcuSense since November 30, 2006. Also disclose whether he is an officer or director of Marchant.

Proposal III, page 18

9. Expand to quantify the number of shares that are expected to be issued in each of the various transactions described in this proxy statement.

Proposal IV, page 19

10. Please provide the disclosure required by Item 14(b)(6) of Schedule 14A. We note the reference in note 2 of the unaudited pro forma consolidated financial statements to an agreed upon value of \$18 million based on a valuation calculation completed “with the assistance of an independent appraiser.”

Business of the Parties, page 19

11. Please expand the last paragraph on page 19 to disclose the amount of consideration paid to acquire the 50.1% of the capital stock of OcuSense in November 2006.

Background of the Merger, page 21

12. We note the disclosure in the second paragraph of page 21 of the preliminary and general discussions with Mr. Donsky. Please disclose the specific amounts of consideration proposed by the parties during the negotiations.
13. Please describe in more detail how the parties determined a full enterprise value of \$18 million. We note the disclosure in the third paragraph on page 21.
14. Please clarify the last sentence in the third paragraph to briefly describe the developmental milestones and whether the purchase price was adjusted in any way as a result of those milestones.
15. Disclose Mr. Vamvakas' affiliation with Marchant.

Merger Consideration, page 22

16. Specifically disclose the value of the merger consideration to be paid for the minority interest.

Reasons for the Proposal, page 30

17. Please expand this section to disclose the material factors that the board considered in acquiring the remaining 49.9% interest in OcuSense.

Securities Purchase Agreement, page 32

18. Disclose where shareholders can view this document and Exhibit A and how they can get a copy of it if necessary.

Part Payment of Marchant's Commissions, page 37

19. Please revise this section to clearly state in an introductory paragraph (1) the total amount paid or to be paid to Marchant for all services to the registrant, (2) the number of shares issued to date for all services, (3) the amount of cash issued to date for all services, and (4) the balances to be paid for all services. Also disclose the total number of shares Marchant will own after all payments.

Proposal X, page 46

20. Update the status of possible NASDAQ delisting.

Principal Stockholders, page 79

21. Expand the disclosure to explain the effect on beneficial ownership, assuming all the proposals are approved and effectuated. Identify the individuals and entities who will beneficially own more than 5% of OccuLogix, and estimate the total number or percentage of shares that will be beneficially owned by the new officers and directors.

Unaudited Pro Forma Consolidated Financial Statements, page 1

Pro Forma Transactions, page 1

22. Please tell us and revise the filing to disclose why you believe adjustments (a), (b), (d) and (e) are directly attributable to the transaction and *factually supportable* as required by Rule 11-02(b)(6) of Regulation S-X. This comment also impacts Note 2 on page 6.

Unaudited Pro Forma Consolidated Statement of Operations, page 4

23. Certain cross-referenced pro forma adjustments to Note 3 herein do not appear correct. In this connection, certain Note 3 adjustment descriptions do not appear correctly labeled. Please correct the references and descriptions as necessary based on our concern.

Notes to Unaudited Pro Forma Consolidated Financial Statements, page 6

2. Pro Forma Consolidated Balance Sheet of OccuLogix, page 6

24. Please revise Note (c) herein to disclose how you determined the value of the stock to be issued in the merger. Also, the nature and expected useful lives or amortization periods of the identified intangibles should be disclosed. Finally, uncertainties regarding the effects of amortization periods assigned to the assets should be highlighted.
25. We note that on page 8 you have “agreed upon an entity value for OcuSense of \$18,000,000, based on a valuation calculation completed with the assistance of an independent appraiser.” Please tell us about the nature and extent of the third party’s involvement in your decision-making process associated with the reference asset valuation.

Form 10-K for the Fiscal Year Ended December 31, 2007

Report of Independent Registered Public Accounting Firm, page 65

26. Please tell us why the audit report from your independent public accounting firm dated March 14, 2008 is not signed as required by Rule 2-02(a) of Regulation S-X. Also refer to Item 302 of Regulation S-T, which addresses signatures in electronic filings. Finally, tell us why their report on the effectiveness of your internal control over financial reporting found on page 115 is also unsigned.

Notes to Consolidated Financial Statements, page 71

Note 4 Acquisitions, page 81

27. We note you used a report from an independent third party valuator to assist in the valuation of intangible assets acquired in your September 2006 Solex business combination. Please tell us about the nature and extent of the third party's involvement in your decision-making process associated with the referenced asset valuation. While in future filings you (management) may elect to take full responsibility for valuing the assets and the liabilities of the acquired entity, if you choose to continue to refer to the expert in any capacity, you may need to 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-K 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.

28. We see that on November 30, 2006 you acquired 50.1% of the capital stock of OcuSense. More specifically, we see you purchased 1,754,589 shares of OcuSense's Series A *Preferred Stock*, par value of \$0.001 per share, representing 50.1% of OcuSense's capital stock on a fully diluted basis for an aggregate purchase price of up to \$8,000,000. In light of the fact you did not invest in OcuSense's common stock and the fact there is no indication the preferred securities you invested in are voting, please explain to us why you consolidated this investment in your financial statements. Reference the U.S. GAAP that supports your conclusions. Please make sure to tell us more about OcuSense's capital structure and how the guidance at EITF 02-14 impacts your required accounting.
29. In a related matter, we note at the closing of the OcuSense purchase which took place on November 30, 2006 you paid \$2,000,000 of the total purchase price, paid another \$2,000,000 installment on January 3, 2007 and in June 2007 paid the third \$2,000,000 installment of the purchase price upon the attainment by OcuSense of the first of two pre-defined milestones. Please explain to us how your accounting for the milestone payments complies with SFAS 141 and EITF 97-8.

Note 10 Discontinued Operations, page 88

30. We note that you sold on December 19, 2007 all of the issued and outstanding shares of SOLX, the Glaucoma Division, to Solx Acquisition in a related party transaction. We also note as part of the sale you retain a royalty interest ranging from 3% to 5% of the worldwide net sales for the SOLX 790 Laser and the SOLX Gold Shunt, including next-generation or future models or versions of these products and a subordinated interest in certain of SOLX's intellectual property to secure the royalty obligation. Please tell us how your presentation of SOLX as a discontinued operation is consistent with paragraph 42(b) of SFAS 144 or other applicable U.S. GAAP.

Note 19 Segment Information, page 108

31. Disclosure of long-lived assets by geographic area under SFAS 131 should present tangible assets only and should not include intangibles or investments. See question 22 to the FASB publication "Segment Information: Guidance on Applying Statement 131." Please address our concern in your future filings.

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and 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 filing;
- 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.

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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.

You may contact Dennis Hult at (202) 551-3618 or Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher  
Assistant Director