



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

Mail Stop 3030

March 4, 2010

Avi S. Katz
President and Chief Executive Officer
GigOptix, Inc.
2300 Geng Road, Suite 250
Palo Alto, CA 94304

Re: GigOptix, Inc.
Registration Statement on Form S-1
Filed February 5, 2010
File No. 333-164739

Dear Mr. Katz:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Fee Table

1. We note your disclosure in footnote 1 on page 53 that 100,000 shares of the 171,429 shares to be offered by Agility Capital are not outstanding. Because these shares will only be issued in the event of a default under the terms of your credit agreement with Agility, which may never occur, it is inappropriate to register the resale of these shares at this time. Please remove these shares from the fee table and revise your disclosure accordingly.

Where You Can Find More Information, page iii

2. Please update your financial statements to comply with Rule 8-08 of Regulation S-X.
3. Please resolve any comments on the Form 8-K/A filed on January 21, 2010 issued in connection with your Form S-1 (333-164738) prior to requesting effectiveness.

Supplementary Executive Compensation Data, page 3

4. We note the inclusion of certain information regarding the compensation earned by your named executive officers during 2009 and your disclosure that you may choose to award additional compensation based on evaluation of each executive's performance during 2009. Please tell us why you have included this disclosure in your registration statement. To the extent that you are presenting material changes to your executive officers' compensation in 2009 when compared with 2008, please advise us as to how you determined that the presentation in your registration statement is comparable with the 2008 information provided in your definitive proxy statement filed July 13, 2009, and that the presentation of any material change in a format other than that required by Item 402 of Regulation S-K is appropriate.

Exhibits

5. Please file the securities purchase agreement and form of warrant to which the shares being offered for resale by purchasers in your December 28, 2009 private placement relate. Also file the January 29, 2010 secured credit facility agreement to which the shares being offered for resale by selling securityholder Agility Capital relate.

Exhibit 10.23

6. An updated accountant's consent should also be included with any amendment to the filing.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment 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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

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You may contact at Kevin Kuhar at (202) 551-3662 or Jay Webb, Reviewing Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or me at (202) 551-3625 with any other questions.

Sincerely,

Mary Beth Breslin
Senior Attorney

cc (via fax): Jeffrey C. Selman, Esq.— Nixon Peabody LLP