

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

Mail Stop 6010

January 18, 2008

Mr. John H. Lowry III Chief Financial Officer Perceptron, Inc. 47827 Halyard Drive Plymouth, Michigan 48170-2461

Re: Perceptron, Inc.

Amended Form 10-K/A for the Fiscal Year Ended June 30, 2007

File No. 000-20206

Dear Mr. Lowry:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. 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 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.

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Form 10-K/A For the Fiscal Year Ended June 30, 2007

Item 8. Financial Statements and Supplementary Data, page 28

Notes to Consolidated Financial Statements, page 34

Note 1. Summary of Significant Accounting Policies, page 34

#### -Short-term Investments, page 35

1. We note you determined that \$6.3 million of your auction-rate securities held at June 30, 2007 started failing beginning in August 2007 and that you identified approximately \$370,000 of a temporary impairment related to these auction-rate securities in October 2007. We note similar disclosures within your September 30, 2007 Form 10-Q. Please tell us and revise your future filings to explain how you determined the timing when to record the aforementioned impairment and the amount of impairment to be recorded related to these auction-rate securities. Refer to the guidance in SFAS 115 and EITF 03-01.

#### Note 9. Stock Incentive Plans, page 41

2. We note from your disclosures that you utilize the Black-Scholes option pricing model to determine the fair value of your stock options. Please revise future filings to explain how you determined the assumptions utilized in these models including volatility, risk free interest rate, expected life, etc. Refer to the guidance in paragraphs A240-242 of SFAS 123(R) and SAB Topic 14.

### Item 9A. Controls and Procedures, page 47

3. We note your statement that your certifying officers concluded that the company's disclosure controls and procedures are "not effective in causing the material information required to be disclosed in the reports that [you] file or submit under the Securities Exchange Act of 1934 to be recorded, processed, summarized and reported, to the extent applicable, within the time periods required for [you] to meet the SEC filing deadlines for theses reports specified in the SEC's rules and forms." We note similar language included in your September 30, 2007 Form 10-Q. The language that is currently included after the words "not effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. Please revise your future filings to remove the language or to revise the disclosure so that the language that appears after the words "not effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).

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## Exhibits 31

4. We note that the certifications filed pursuant to Exchange Act Rule 13a-14(a) are not in the exact form prescribed by Item 601(b)(31) of Regulation S-K. Specifically, we note that you improperly include the title of the certifying official in the introduction of your certification. We note similar modifications within your September 30, 2007 Form10-Q. Please revise your certifications in future filings to conform to the exact wording required by Item 601(b)(31) of Regulation S-K.

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 that keys your responses to our comment and provides any requested information. Detailed cover letters greatly facilitate our review. 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 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.

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 Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3616 if you have questions regarding these comments. In this regard, do not hesitate to contact Kevin Vaughn, Branch Chief, at (202) 551-3643.

Sincerely,

Lynn Dicker Reviewing Accountant Mr. John H. Lowry III Perceptron, Inc. January 18, 2008 Page 4