



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3030

February 24, 2009

VIA U.S. MAIL and FACSIMILE: (312) 759-5646

Mr. Claudio Mannarino  
Vice President-Finance and Chief Financial Officer  
API Nanotronics Corp.  
2300 Yonge Street, Suite 1710  
Toronto, Ontario

**RE: API Nanotronics Corp.  
Form 10-K for the Fiscal Year Ended May 31, 2008  
Filed on October 25, 2008  
File No. 000-29429**

Dear Mr. Mannarino:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Annual Report on Form 10-K as of May 31, 2008

Financial Statements

Note 2. Inventories, page F-17

1. We note that you recorded an inventory impairment of \$2.8 million during fiscal 2008. Please tell us and disclose in future filings the specific circumstances that resulted in the impairment and how you determined the amount.

Note 2. Goodwill and Intangible Assets, page F-10

Note 9. Goodwill and Intangible Assets, page F-19

2. We note your disclosure in Note 1 on page F-10 that you determined that there is no impairment in goodwill as of May 31, 2008. In light of your recurring losses and decreasing stock price, and the economic downturn, please tell us how you determined that there was no impairment in goodwill. In that regard, tell us and revise future filings to disclose how you applied the requirements of SFAS 142 in evaluating recorded goodwill for impairment.
3. In addition, tell us and revise future filings to disclose the reason that amortization is currently not being recorded for your patents and clarify when you expect these assets to be placed in service.

Note 14. Income Taxes, page F-21

4. We reference the net deferred tax assets recorded in your financial statements at May 31, 2008. In light of your recurring losses, please tell us and disclose in future filings how you concluded that deferred tax assets reported on your balance sheet are more likely than not recoverable. In your response, please fully explain how you applied the guidance from SFAS 109 paragraphs 20 through 25 in concluding that reported deferred tax assets are more likely than not recoverable. In that regard, please describe all relevant positive and negative evidence considered, including how you evaluated and weighed that evidence in performing your evaluation.

Exhibit 31.1 and 31.2 Certifications

5. We note that each principal executive officer and principal financial officer has certified the annual report in his/her role as an officer of the registrant. Please amend future filings to identify the certifying individual without providing the officer's title in the first sentence of the certification. Refer to paragraph (B)(31)(i) of Item 601 of Regulation S-K.

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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 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 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 Jong Hwang at (202) 551-3327 or me at (202) 551-3676 if you have questions about these comments. In this regard, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671 with any other questions.

Sincerely,

Brian Cascio  
Accounting Branch Chief