



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

December 20, 2006

VIA U.S. MAIL AND FAX (805) 683-9496

Mr. William J. Buchanan
Controller (Principal Financial Officer)
Superconductor Technologies Inc.
460 Ward Drive
Santa Barbara, CA 93111-2356

**Re: Superconductor Technologies
Form 10-K for Fiscal Year Ended December 31, 2005
Filed March 8, 2006
Form 10-Q for the Quarter Ended September 30, 2006
Filed November 9, 2006
File No. 0-21074**

Dear Mr. Buchanan:

We have reviewed your filings and have the following comments. We have limited our review to 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 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 or may not 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 December 31, 2005

Note 7 – Stockholders’ Equity, page F-15
Common Stock, page F-15

1. Citing your basis in the accounting literature, tell us how you accounted for the negotiated discount to market of your stock offering and the related 5-year warrants. Please disclose the significant terms of the warrants.

Note 14 – Details of Certain Financial Statement Components and Supplemental Disclosures of Cash Flow Information and Non-Cash Activities, page F-23

2. In light of the circumstances that led you to conclude that goodwill was impaired, tell us if you also tested your long-lived assets for recoverability. If not, tell us why. Refer to paragraph 8 of SFAS 144.

Quarterly Financial Data (Unaudited), page F-26

3. Please add a footnote that explains the large fluctuations in revenue between quarters.

Schedule II – Valuation and Qualifying Accounts, page F-27

4. We note that you include inventory valuation in Schedule II and that you have reduced your inventory reserve by \$3.2 million for the fiscal years ended December 31, 2005. In this regard, tell us in detail how your record and release your inventory reserves. Provide us with sample journal entries. Specifically address the \$3.2 million adjustment. Tell us how you considered SAB Topic 5:BB.

Form 10-Q for the Fiscal Quarter Ended September 30, 2006

2. Summary of Significant Accounting Policies, page 5
Stock-based Compensation, page 9

5. We refer to your statement that the cost impact of the accelerated options in 2005 was \$3.7 million. However, based on our review of your Form 10-K for the fiscal year ended December 31, 2005, it is unclear to us if this cost impact was recorded in the financial statements for the year ended December 31, 2005. Please clarify.

Results of Operations, page 22

6. We note your statement that your gross margins were impacted by charges for excess and obsolete inventory of approximately \$ 270,000 in the first nine months of 2006. However, based on page 17 we also note that your inventory reserve decreased from \$3.2 million at December 31, 2005 to \$1.6 million at September 30, 2006.

- Tell us how the decrease in inventory reserve was accounted for in the financial statements
- Please revise your MD&A to disclose the impact of the inventory reserve reversal on gross margins, if any.
- Tell us why you recorded charges of \$ 270,000 for excess and obsolete inventory when you appeared to have adequate inventory reserves.

* * * *

As appropriate, please amend your filings and respond to these comments via EDGAR 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 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 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 filings; 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 filings or in response to our comments on your filings.

Mr. William J. Buchanan
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You may contact Kathryn Jacobson, Staff Accountant, at (202) 551-3365 or Inessa Kessman, Senior Staff Accountant, at (202) 551-3371 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel
Assistant Director