

Via Facsimile and U.S. Mail
Mail Stop 6010

February 23, 2007

Bruce C. Galton
President and Chief Executive Officer
Senesco Technologies, Inc.
303 George Street, Suite 420
New Brunswick, New Jersey

Re: Senesco Technologies, Inc.
Form 10-K for Fiscal Year Ended June 30, 2006
Filed October 13, 2006
File No. 001-31326

Dear Mr. Galton:

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. In our comments, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. 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 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 – June 30, 2006

Consolidated Financial Statements, page F-1

Notes To Consolidated Financial Statements, page F-9

1 Principal Business Activity and Summary of Significant Accounting Policies, page F-9

1. Please tell us what your patents, including those with pending applications, are used for and whether and to what extent they are used in research and

development activities. If so, justify for us the appropriateness of capitalizing costs. Please refer to paragraph 11 of FAS 2.

2. In your discussion of your amortization policy as it relates to patent applications on page F-10, you state that you defer commencement of amortization until the patent has been approved. Please explain to us with specific references to the portions of the authoritative literature how you determined that this deferral of amortization is appropriate. Further provide to us in disclosure type format a discussion of the usual lengths of time associated with the patent application process, and your accounting if a patent is denied or becomes impaired in some way during the application process.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include 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 your letter, 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.

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You may contact James Peklenk, Staff Accountant, at (202) 551-3661, or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant