

June 15, 2007

Mail Stop 6010

F. Scott Moody
Chief Executive Officer
AuthenTec, Inc.
100 Rialto Road, Suite 400
Melbourne, FL 32901

**Re: AuthenTec, Inc.
Registration Statement on Form S-1
Filed June 7, 2007
File No. 333-141348**

Dear Mr. Moody:

We have reviewed your filing and have the following 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.

1. We note your filing on June 8, 2007. Please note that Rule 424(a) was amended in Securities Act Release No. 6714 to eliminate the filing of revised preliminary prospectuses in any manner other than pursuant to a pre-effective amendment to the registration statement. See Manual of Publicly Available Telephone Interpretations B.80.

Employment Arrangements with Named Executive Officers, page 64

Principal and Selling Stockholders, page 69

2. Please identify the individuals with beneficial ownership of the shares held by the entities listed in the selling stockholder table.
3. Please tell us whether any of the selling stockholders are broker-dealers or affiliates of broker-dealers. A selling shareholder who is a broker-dealer must be

identified in the prospectus as an underwriter. In addition, a selling stockholder who is an affiliate of a broker-dealer must be identified in the prospectus as an underwriter unless that selling stockholder is able to make the following representations in the prospectus: the selling shareholder purchased the shares being registered for resale in the ordinary course of business, and at the time of the purchase, the selling shareholder had no agreements or understandings, directly or indirectly, with any person to distribute the securities. Please revise as appropriate.

Exhibit 5.1

4. We note your opinion of counsel is limited to the review of “charter documents and records of corporate proceedings.” Counsel should clarify in the opinion that it has reviewed all documents necessary to issue this opinion.
5. We note you have limited your opinion of counsel to securities “if, as and when issued by AuthenTec in accordance with the related prospectus....” Counsel should revise the opinion to clarify that the opinion also covers the legality of the securities being offered and sold by the selling stockholders in this offering.

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.

F. Scott Moody
AuthenTec, Inc.
June 15, 2007
Page 3

You may contact Praveen Kartholy at (202) 551-3378 or in his absence, Brian Cascio at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at (202) 551-3637 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher
Assistant Director

cc (via Fax): Nancy A. Spangler, Esq.
John E. Depke, Esq.
Tony Saur, Esq.