

May 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 May 4, 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.

Prospectus Summary

1. We note your response to prior comment 2. We reissue the comment in part. In your first paragraph where you disclose your revenue growth, please balance the disclosure to also include a discussion of your losses and accumulated deficit.
2. We note your response to prior comment 3 and your new disclosure on page 3. We reissue the comment. Please provide the requested disclosure in the first paragraph.

Capitalization, page 24

3. Please revise to present mandatorily redeemable preferred stock outside of stockholders' equity (deficit) similar to the presentation in the consolidated balance sheets on page F-3.

Management's Discussion and Analysis, page 30

4. We note your response to prior comment 12 and the new paragraph at the end of page 30. Please expand your summary discussion in this section. Please discuss material business opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which the company's executives are most focused, and the actions they are taking in response to them. For further guidance on the content and purpose of the "Overview," see Interpretive Release No. 33-8350 on our website.

Compensation Discussion and Analysis, page 56

5. We note your response to prior comment 18. Please identify the third parties that compiled the compensation survey data for you and the disclosure required by Item 407(e)(3)(iii), if applicable. If the compensation survey data is data on specific companies rather than aggregated data, please disclose the companies. Also, identify the technology companies that have completed their initial public offerings in the past three to four years whose data your compensation committee considered.
6. We note your response to prior comment 19.
  - Please discuss the "performance goals" set annually by the committee for the Chief Executive Officer.
  - Also, please describe more specifically the how your committee evaluates how each executive "carries out the responsibilities of his position" in determining base salary.
7. We note your response to prior comment 20 and your discussion of targeted revenues, net income and new target development. As these are only part of the goals and milestones, please provide quantitative discussion of the terms of the other necessary targets to be achieved in order for your executive officers to earn their discretionary annual bonuses. Also, provide a detailed analysis of why you believe the revenue and net income targets should not be disclosed. See SEC Release No. 33-8765A.
8. We note your response to prior comment 21. Clarify in your disclosure that the bonus plan is identified in the summary compensation table as "non-equity incentive plan compensation."
9. We note your response to our prior comment 22. The amount shown in the Summary Compensation Table reflecting Mr. Moody's compensation expense recorded in 2006 for his option awards is identical to the fair value disclosed in the Grants of Plan-Based Awards table. Please revise this Plan-Based Award

table to calculate the grant date fair value in conformity with Section 402(d)(2)(viii) and SFAS 123(R).

Financial Statements

Note 1. Summary of Significant Accounting Policies, page F-7

10. Please provide the management representations for the interim financial statements required by Rule 10-01(b)(8) of Regulation S-X.

Note 8. Share Based Compensation, page F-24

11. We note that on pages F-21 and F-22 you refer to using the valuation of an independent third party for the retrospective valuation performed as of June 29, 2006 and December 1, 2006 to determine the fair value of your ordinary shares. Please revise the filing to name the independent valuation expert here and in the Experts section, and include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

Note 11. Subsequent Events, page F-22

12. Please tell us why the February 28, 2007 issuance of the senior secured convertible notes is included in subsequent events.

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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

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.

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