



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

Mail Stop 6010

August 30, 2007

Via Facsimile and U.S. Mail

Mr. Bevil J. Hogg
Chief Executive Officer
Stereotaxis, Inc.
4320 Forest Park Avenue, Suite 100
St. Louis, MO 63108

Re: Stereotaxis, Inc.
Form 10-K for the year ended December 31, 2006
Filed March 13, 2007
Form 10-Q for the quarter ended June 30, 2007
File No. 0-50884

Dear Mr. Hogg:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review 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 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 year ended December 31, 2006

Management's Discussion and Analysis of Financial Condition and Results of Operation, page 46

Critical Accounting Policies and Estimates, page 47

1. Your critical accounting policy disclosure for revenue recognition, investments and inventories does not provide the information related to the underlying estimates and judgments required by FR-72 and SEC Release No. 33-8098. The critical accounting policy discussion should supplement, not duplicate, the description of accounting policies that are disclosed in the notes to the financial statements. While accounting policy notes in the financial statements generally describe the method used to apply an accounting principle, the discussion in MD&A should present a company's analysis of the uncertainties involved in applying a principle at a given time or the variability that is reasonably likely to result from its application over time. Please revise future filings as necessary to specifically address the following:
 - Provide information regarding how you arrived at the estimate;
 - How accurate the estimate or assumption has been in the past;
 - How much the estimate or assumption has changed in the past; and
 - Whether the estimate or assumption is reasonably likely to change in the future.

Financial Statements, page 57

Statement of Operations, page 60

2. Consistent with Items 5-03.1 and .2 of Regulation S-X, you should generally state revenues and costs of revenues derived from each subcaption separately. As described in Rule 5-03(b), you may combine income from each class which is not more than 10 percent of the sum of the items with another class that is derived from more than one of the subcaptions in Rule 5-03.1. However, if you combine items, you should also combine related costs and expenses as described under Rule 5-03.2 in the same manner. Please revise in future filings.

Note 2. Summary of Significant Accounting Policies, page 65

Revenue and Costs of Revenue, page 66

3. With reference to the first paragraph of this section, we note that the sentence refers to "the above criteria." This appears to be an error in the placement of this paragraph since there is no discussion of revenue recognition criteria preceding this paragraph. Please correct and complete your disclosure in future filings.

4. In the third paragraph you disclose that you record costs for installation, training and product maintenance at the time of sale. In the second paragraph you disclose that revenues from services are deferred and amortized over the service period. Please tell us why you record costs for these services at the time of sale while you defer the related revenues. Cite the accounting literature upon which you relied.
5. Total current and long-term deferred revenue as of December 31, 2006 is \$6,883,727. Please show us the significant components of this deferred revenue balance and tell us how you are recognizing the related revenue (for example, straight-line over the maintenance period of 12 months).

Product Warranty Provisions, page 68

6. Please tell us and disclose in future filings the information required by paragraph 14 of FIN45.

Note 11. Stockholders' Equity, page 73

7. On page 74 you disclose that you generally issue new shares upon the exercise of your stock appreciation rights. You also combine options and rights in your disclosures on page 75 and appear to reflect exercise prices for the rights. Please tell us and disclose in future filings the significant terms of your stock appreciation rights, consistent with paragraph A240(a) of SFAS 123R.
8. Further, please also discuss why you did not provide separate disclosures for your options and stock appreciation rights under paragraph A240(f) of SFAS 123R.
9. Please tell us and disclose in future filings the weighted-average grant-date fair value of equity options or other equity instruments granted during the year, consistent with paragraph A240(c)(1) of SFAS 123R.
10. Please tell us and disclose in future filings the weighted-average grant-date fair value of your nonvested stock for each of the categories specified in paragraph A240(b)(2) of SFAS 123R.
11. Please tell us and disclose in future filings the total fair value of shares vested during the year, consistent with paragraph A240(c)(2) of SFAS 123R.
12. With respect to your 2004 Employee Stock Purchase Plan, please tell us how you evaluated paragraphs 12 -13 of SFAS 123R in determining that the plan is not compensatory.

Note 17. Segment Information, page 80

13. We note from the table of revenues by geographic region that approximately 37% of your revenues for 2006 are attributed to “International” customers. Please revise in future filings, as applicable, to separately disclose revenues attributed to each country from which you derive material revenues, consistent with paragraph 38(a) of SFAS 131.

Controls and Procedures, page 82

14. We note your disclosure that your “Chief Executive and Chief Financial Officer have concluded that, as of the end of such period, the Company’s disclosure controls and procedures were effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by the Company in the report that it files or submits under the Exchange Act.” The language that is currently included after the word "effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. Please remove the language in your future filings or revise the disclosure so that the language that appears after the word "effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).

Form 10-Q for the Quarterly Period Ended June 30, 2007

Financial Information, page 3

Revenue Recognition, page 6

15. Tell us why you determined “that installation met the criteria under SAB 104 and EITF Issue 00-21 for recognition as a separate element or unit of accounting” in the second quarter of 2007. Further, the revenue recognition policy appears to be different than the policy disclosed in your December 31, 2006 Form 10-K on page 66. Please compare your revenue recognition policies for all of the periods presented in your December 31, 2006 Form 10-K and June 30, 2007 Form 10-Q and explain any differences and the reasons for those differences.
16. Further, to help us understand your current revenue recognition policy, please tell us the significant terms of your significant agreements with customers and how you evaluated those terms in determining your revenue recognition policies under SAB Topic 13.A and EITF Issue 00-21.

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 with your response 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

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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 and 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.

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 David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3604 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kaitlin Tillan
Assistant Chief Accountant