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September 10, 2009

VIA EDGAR AND FEDERAL EXPRESS

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: Mary Beth Breslin and Daniel Morris

> Re: Stereotaxis, Inc. Registration Statement on Form S-3 Filed August 6, 2009 File No. 333-161078

Dear Ms. Breslin and Mr. Morris:

We are writing this letter on behalf of Stereotaxis, Inc. (the "Company") in response to the letter, dated August 24, 2009, of the Staff (the "Staff") of the U.S. Securities and Exchange Commission (the "SEC") regarding the above-referenced filing. This letter sets forth each comment of the Staff in the comment letter (italicized and numbered in accordance with the comment letter) and, following each comment, sets forth the Company's response. Note that comment letter referred to a separate letter from the Staff, also dated August 24, 2009, setting forth certain comments to the Company's 10-K for the Fiscal Year Ended December 31, 2008, filed March 13, 2009 and Form 8-K dated August 6, 2009 (File No. 000-50884).

Incorporation of Certain Documents by Reference, page 29

1. Please resolve all comments regarding your Exchange Act reports before request acceleration of the effective date of the registration statement.

The Company understands that it has resolved all comments with the Staff set forth in the separate letter regarding the referenced Exchange Act reports.

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We note the Staff's request that the Company include certain acknowledgements in any request for acceleration of effectiveness of the registration statement, and the Company will comply with such request. If you require any additional information on

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these issues, or if we can provide you with any other information which will facilitate your continued review of this filing, please advise us at your earliest convenience. You may reach me at (314) 259-2447 or by fax at (314) 552-8447.

Sincerely,

/s/ Robert J. Endicott

Robert J. Endicott

cc: James M. Stolze (Stereotaxis, Inc.) James L. Nouss, Jr. Cliff Jenks