

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 8-K

CURRENT REPORT Pursuant
to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of report (Date of earliest event reported) March 12, 2007

STEREOTAXIS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-50884

94-3120386

(Commission File Number)

(IRS Employer Identification No.)

**4320 Forest Park Avenue,
St. Louis, Missouri**

63108

(Address of Principal Executive Offices)

(Zip Code)

(314) 678-6100

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement

On March 12, 2007, Stereotaxis, Inc. (the "Company") entered into a Third Loan Modification Agreement with Silicon Valley Bank. This Third Loan Modification Agreement retains substantially all of the same terms and conditions as the Second Loan Modification, which was in effect at December 31, 2006, but increases the maximum borrowing capacity to \$25 million, an increase of \$15 million, and provides for an additional \$2 million in equipment advances to be drawn prior to June 30, 2007. In the event the Company's quick asset ratio (as defined in the agreement) falls below 1.75 to 1, the Company would be required to meet certain operating performance covenants. The maturity date of the revolving line of credit under the Third Loan Modification Agreement is extended to March 2009 and the interest rate is adjusted to the lender's prime rate plus either 0.25% or 0.75%, depending on a defined liquidity measure.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

STEREOTAXIS, INC.

Date: March 14, 2007

By: /s/ James M. Stolze

Name: James M. Stolze
Title: Vice President and Chief Financial Officer