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)

July 30, 2010

STEREOTAXIS, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-50884 94-3120386

(Commission File Number)

(IRS Employer Identification No.)

4320 Forest Park Avenue, Suite 100, 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):

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

On July 30, 2010 Stereotaxis, Inc. (the "Company") entered into that certain Fifth Amendment to the Development Alliance and Supply Agreement (the "Agreement") with Biosense Webster, Inc. ("Biosense Webster") which amends the terms of certain agreements between the Company and Biosense Webster.

The Agreement extends Biosense Webster's exclusive distribution rights for the Company's non-irrigated catheters until December 31, 2010 in order to pursue U. S. FDA regulatory approval for expanding the indications for use of magnetically enabled devices for atrial fibrillation ("AF") indications and undertake the development of improvements to certain devices, or to design the next generation of magnetically enabled irrigated catheters subject to the execution of a written agreement between the parties; and in order that the parties may explore the design of remote clinical support applications of Stereotaxis' Odyssey™ platform for Biosense Webster to use with its customers worldwide and the possible extension of Biosense Webster's non-exclusive Odyssey license to include rights to distribute Odyssey products to its customers as a consolidated solution with its CARTO products, both subject to the execution of a written agreement between the parties. The Agreement also updates the parties' revenue sharing arrangement in accordance with such extension.

A copy of the Agreement is being filed as Exhibit 10.1 hereto and the information contained therein is hereby incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

Exhibits

10.1 Fifth Amendment to the Development Alliance and Supply Agreement, dated July 30, 2010 by and between Stereotaxis, Inc. and Biosense Webster, Inc.

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: July 30, 2010 By: /s/ Daniel J. Johnston

Name: Daniel J. Johnston Title: Chief Financial Officer

FIFTH AMENDMENT TO THE DEVELOPMENT ALLIANCE AND SUPPLY AGREEMENT BETWEEN BIOSENSE WEBSTER, INC. AND STEREOTAXIS, INC.

This fifth amendment ("Fifth Amendment") is made effective as of July 30, 2010 and amends the Development Alliance and Supply Agreement dated May 7, 2002 between Biosense Webster, Inc. ("Biosense Webster") and Stereotaxis, Inc. ("Stereotaxis") (the "Master Collaboration Agreement"), as amended previously by: (i) the Amendment to Development and Supply Agreement dated November 3, 2003 (the "First Amendment") (the Master Collaboration Agreement and First Amendment collectively referred to as the "Amended Master Agreement"); (ii) the side letter between the parties dated November 3, 2003, regarding research and development (the "R&D Side Letter"); (iii) the Alliance Expansion Agreement dated May 4, 2007 ("Expansion Agreement"); (iv) four side letters between the parties, each dated May 4, 2007, whose subject matter was, respectively, CARTO® Pro RMT, Third Party Collaboration Rights, Exclusivity and the meaning of Customers in the Non-Localized Alliance (collectively, the "2007 Side Letters"); (v) the Second Amendment to Development Alliance and Supply Agreement, dated July 18, 2008 (the "Second Amendment"), (vi) the Third Amendment to Development Alliance and Supply Agreement, dated May 1, 2010 (the "Fourth Amendment") (the Master Collaboration Agreement, First Amendment, R&D Side Letter, Expansion Agreement, 2007 Side Letters, Second Amendment, Third Amendment, and Fourth Amendment collectively referred to as the "Existing Agreements").

WHEREAS, Stereotaxis and Biosense Webster have, pursuant to the Existing Agreements, agreed to jointly develop a Compatible NIOBE $^{\text{TM}}$ – CARTO $^{\text{R}}$ System and to jointly develop certain associated proprietary, interventional, disposable, electrophysiology devices and to manufacture, market and sell such products; and

WHEREAS, in order to pursue U. S. FDA regulatory approval for expanding the indications for use of magnetically enabled devices for atrial fibrillation ("AF") indications and undertake the development of improvements to certain devices, or to design the next generation of magnetically enabled irrigated catheters, the latter subject to the execution of a written agreement between the parties, the parties have agreed to extend Biosense Webster's exclusive distribution rights with respect to Non-Irrigated Catheters (as defined in the Existing Agreements) previously developed under the Existing Agreements; and

WHEREAS the parties further wish to explore the design of remote clinical support applications of Stereotaxis' Odyssey™ platform for Biosense Webster to use with its customers worldwide, and Biosense Webster wishes to extend its non-exclusive Odyssey license to include rights to distribute Odyssey products to its customers as a consolidated solution with its CARTO products, both subject to the execution of a written agreement between the parties;

NOW, THEREFORE, in consideration of the mutual promises, covenants and conditions herein, the Parties agree as follows:

- 1. Biosense Webster's exclusive distribution rights for the Non-Irrigated Catheters (as defined in the Existing Agreements) will be extended to December 31, 2010.
- 2. Section 3.2(a) of the Second Amendment is hereby amended so that in 3.2(a)(i) the reference to August 1, 2010 will be deleted and replaced with January 1, 2011, and in 3.2(a)(ii), the reference to July 31, 2010 will be deleted and replaced with December 31, 2010.
- 3. Terms and definitions used in this Fifth Amendment but not defined shall have the same meanings given to such terms in the Existing Agreements.
- 4. Except as expressly modified by this Fifth Amendment, the terms of the Existing Agreements shall retain their full force and effect without modification.
- 5. This Amendment may be executed in multiple counterparts, each of which shall be an original as against any party whose signature appears thereon but all of which together shall constitute one and the same instrument.
- 6. The terms of this Fifth Amendment may be modified only through a written agreement signed by both Biosense Webster and Stereotaxis.
- 7. This Fifth Amendment and all rights and obligations of the parties hereunder, including, but not limited to the distribution rights of Biosense pursuant to Section 1 are intended to survive the termination or expiration of any of the Existing Agreements.

IN WITNESS WHEREOF, the Parties hereto have caused this Fifth Amendment to be signed by duly authorized officers or representatives, effective as of the date first written above.

STEREOTAXIS, INC.			BIOSENSE WEBSTER, INC.			
By:	/s/ Michael P. Kaminski		By:	/s/ Uri Yaron		
Name:	Michael P. Kaminski		Name:	Uri Yaron		
Title:	President & CEO		Title:	VP, WW Business Dev.		
Date:	7-30-10		Date:	July 3, 2010		
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