

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

OCULUS INNOVATIVE SCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

68-0423298
(I.R.S. Employer
Identification No.)

1129 N. McDowell Blvd.
Petaluma, CA
(Address of principal executive offices)

94954
(Zip Code)

Oculus Innovative Sciences, Inc. Amended and Restated 2006 Stock Incentive Plan
(Full title of the plans)

Hojabr Alimi
Chief Executive Officer
Oculus Innovative Sciences, Inc.
1129 N. McDowell Blvd.
Petaluma, CA 94954
(707) 782-0792
(Name, address and telephone
number of agent for service)

Copy to:
Amy M. Trombly, Esq.
Trombly Business Law
1320 Centre Street, Suite 202
Newton, MA 02459
(617) 243-0060

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Securities To Be Registered	Amount To Be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value \$0.0001 per share, issued under the Oculus Innovative Sciences, Inc. Amended and Restated 2006 Stock Incentive Plan	1,308,071(3)	\$ 1.83	\$2,393,770	\$ 170.68

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend, recapitalization or any other similar transaction effected without receipt of consideration, which results in an increase in the number of the Registrant's outstanding shares of Common Stock.
- (2) Estimated solely for calculating the registration fee pursuant to Rules 457(h) and 457(c) under the Securities Act, based on the average of the high and low prices of the Common Stock as reported on the Nasdaq Capital Market on December 20, 2010.
- (3) Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Registrant's Amended and Restated 2006 Stock Incentive Plan pursuant to an "evergreen" provision in the Plan. Under this provision, the number of shares authorized for issuance increased on April 1, 2010.

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PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

In accordance with the Instructional Note to Part I of Form S-8 as promulgated by the Securities and Exchange Commission, the information specified by Part I of Form S-8 has been omitted from this registration statement on Form S-8.

Item 2. Registrant Information and Employee Program Annual Information.

The registrant will provide without charge to each person to whom a copy of a Section 10(a) prospectus hereunder is delivered, upon the oral or written request of such person, a copy of any document incorporated in this registration statement by reference. The registrant will also make available without charge, upon oral or written request, other documents required to be delivered pursuant to Rule 428(b). Requests for such information should be directed to: Investor Relations, Oculus Innovative Sciences, Inc., 1129 N. McDowell Blvd., Petaluma, California 94954, telephone (707) 782-0792.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Securities and Exchange Commission are hereby incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 2010, filed on June 8, 2010, pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act");
- (b) Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2010, filed on August 5, 2010 and Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2010, filed on November 4, 2010;
- (c) Registrant's Current Reports on Form 8-K, filed on April 2, 2010, May 6, 2010, and September 17, 2010;
- (d) Registrant's Proxy Statement on Schedule 14A filed on July 29, 2010; and
- (e) The description of Registrant's Capital Stock contained in Registrant's registration statement on Form 8-A, filed on December 15, 2006 pursuant to Section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

In addition, all documents subsequently filed by Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

No named expert or counsel was hired on a contingent basis, will receive a direct or indirect interest in the registrant or was a promoter, underwriter, voting trustee, director, officer or employee of the registrant. No expert or counsel has any contingent based agreement with the registrant or any other interest in or connection to the registrant.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law, as amended, authorizes a court to award or a corporation's board of directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933. Article VIII of the Registrant's Restated Certificate of Incorporation (Exhibit 3.1(i) to the Annual Report for the year ended March 31, 2007, filed on June 20, 2007) and Article 6 of the Registrant's Amended and Restated Bylaws, as amended (Exhibit 3.3 to the Quarterly Report for the quarter ended September 30, 2010, filed on November 11, 2010) provide for indemnification of the Registrant's directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law.

The Registrant has entered into Indemnification Agreements (Exhibit 10.1 to the Form S-1 Registration Statement, as amended, declared effective on January 24, 2007 (File No. 333-135584)) with its officers and directors that will require the Registrant to, among other things, indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers to the fullest extent not prohibited by law.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description
5.1	Opinion of Amy Trombly, Esq. (filed herewith).
10.1	Oculus Innovative Sciences, Inc. Amended and Restated 2006 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed May 2, 2007).
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Counsel (included in Exhibit 5.1).

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

- To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment shall be deemed a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) of section 15(d) of the Securities Act of 1933 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Petaluma, State of California, on the 23rd day of December, 2010.

OCULUS INNOVATIVE SCIENCES, INC.

By /s/ Hojabr Alimi
Hojabr Alimi
Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Hojabr Alimi</u> Hojabr Alimi	Chief Executive Officer (Principal Executive Officer) and Director	December 23, 2010
<u>/s/ Robert E. Miller</u> Robert E. Miller	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	December 23, 2010
<u>/s/ Gregg Alton</u> Gregg Alton	Director	December 23, 2010
<u>/s/ Jay Birnbaum</u> Jay Birnbaum	Director	December 23, 2010
<u>/s/ Richard Conley</u> Richard Conley	Director	December 23, 2010
<u>/s/ Gregory M. French</u> Gregory M. French	Director	December 23, 2010
<u>/s/ James J. Schutz</u> James. J. Schutz	Director	December 23, 2010

AMY TROMBLY, ESQ.
1320 Centre Street, Suite 202
Newton, MA 02459
(617)243-0060

December 23, 2010

Oculus Innovative Sciences, Inc.
1129 N. McDowell Blvd.
Petaluma, CA 94954

Re: Registration Statement on Form S-8

Gentlemen:

I have acted as counsel to Oculus Innovative Sciences, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of a Registration Statement on Form S-8 (the "Registration Statement"), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended, of a total of 1,308,071 shares (the "Shares") of its common stock, par value \$0.0001 (the "Common Stock"). This opinion is being rendered in connection with the filing of the Registration Statement. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, I have examined the Company's Restated Certificate of Incorporation and Amended and Restated Bylaws, as Amended, both as currently in effect and such other records of the corporate proceedings of the Company and certificates of the Company's officers as I deemed relevant; and the Registration Statement and the exhibits thereto.

In my examination, I have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies.

Based upon the foregoing, I am of the opinion that (i) the Shares have been duly and validly authorized by the Company and (ii) the Shares, when issued as described in the Registration Statement, will be duly and validly issued, fully paid and non-assessable shares of Common Stock.

My opinion is limited to the Delaware General Corporation Law and federal securities laws of the United States and I express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction. This opinion is limited to the matters stated herein. I disavow any obligation to update this opinion or advise you of any changes in my opinion in the event of changes in the applicable laws or facts or if additional or newly discovered information is brought to my attention.

I understand that you wish to file this opinion as an exhibit to the Registration Statement, and I hereby consent thereto.

Very truly yours,

/s/ Amy Trombly, Esq.

Amy Trombly, Esq.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Oculus Innovative Sciences, Inc. on Form S-8 of our report dated June 8, 2010, with respect to our audits of the consolidated financial statements of Oculus Innovative Sciences, Inc. and Subsidiaries as of March 31, 2010 and 2009 and for the years then ended appearing in the Annual Report on Form 10-K of Oculus Innovative Sciences, Inc. for the year ended March 31, 2010.

/s/ Marcum LLP
New York, New York
December 22, 2010
