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

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

OCULUS INNOVATIVE SCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware		3841 68-0423298		23298
(State or other jurisdiction of incoor or organization)	-	nary Standard Industrial sification Code Number)	(I.R.S. Employer Ide	ntification Number)
Oculus Innovati 1129 N. McI Petaluma,	ve Sciences, Inc. Dowell Blvd. CA 94954 32-0792	Oct	Hojabr Alimi Chief Executive Officer rlus Innovative Sciences, 1129 N. McDowell Blvd Petaluma, CA 94954 (707) 782-0792 including zip code, and to	, Inc.
including area code, of regi	strant's principal executiv		ng area code, of agent for	
	Сорі	es of communications to:		
	1320 P	my M. Trombly, Esq. Centre Street, Suite 202 Newton, MA 02459 Phone (617) 243-0060 Fax (617) 243-0066		
Approximate date of proposed sa	e to the public: From time	e to time after this registration st	atement becomes effective	e.
If any of the securities being regis Securities Act of 1933 check the		be offered on a delayed or conti	nuous basis pursuant to Ru	ule 415 under the
If this Form is filed to register adfollowing box and list the Securit offering. ☑ 333-158539				
If this Form is a post-effective an Securities Act registration statem				g box and list the
If this Form is a post-effective an Securities Act registration statem				g box and list the
Indicate by check mark whether t company. See the definitions of "Exchange Act. (Check one):				
Large accelerated filer ☐ Ac	celerated filer \square	Non-accelerated filer Do not check if a smaller report		reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Unit		Proposed Maximum Aggregate Offering Price		Amount of Registration Fee	
Units, each consisting of one share of common stock, \$0.0001 par value, and one warrant Shares of common stock included as part of the	554,000 Units	\$	2.45	\$	1,357,300	\$	76

Units	554,000 shares	_	_	<u>(4)</u>
Warrants included as part of the Units	277,000 warrants	_	_	-(4)
Shares of common stock underlying the warrants				
included in the Units	277,000 shares	\$ 3.3875	\$ 938,338	\$ 52
TOTAL			\$ 2,295,638	\$ 128

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this registration statement shall be deemed to cover additional securities that may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) The 554,000 Units being registered under this Registration Statement are in addition to the 1,900,000 Units registered pursuant to the Registration Statement on Form S-1 (File No. 333-158539)
- (3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(a).
- (4) No fee pursuant to Rule 457(g).

THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE UPON FILING WITH THE SECURITIES AND EXCHANGE COMMISSION IN ACCORDANCE WITH RULE 462(b) UNDER THE SECURITIES ACT .

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EX-23.1

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This Registration Statement on Form S-1 is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended and relates to the Registration Statement on Form S-1, as amended (File No. 333-158539), initially filed by the Oculus Innovative Sciences (the "Company") on April 10, 2009 and declared effective by the Securities and Exchange Commission on July 24, 2009. The Company is filing this Registration Statement for the sole purpose of increasing the aggregate number of shares of common stock offered by the Company by 554,000 units, consisting of an aggregate of 554,000 shares of the Company's common stock and warrants to purchase up to 277,000 shares of the Company's common stock. Pursuant to Rule 462(b), the contents of the Registration Statement on Form S-1, as amended (File No. 333-158539) are incorporated by reference into this Registration Statement.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant 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 July 28, 2009.

OCULUS INNOVATIVE SCIENCES, INC.

By: /s/ Hojabr Alimi

Hojabr Alimi

President, Chief Executive Officer and Chairman of

the Board

Pursuant to the requirements of the Securities Act of 1933, this registration statement was signed by the following persons in the capacities and on the dates stated.

Signature	Title	Date
/s/ Hojabr Alimi Hojabr Alimi	President, Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	July 28, 2009
/s/ Robert E. Miller Robert E. Miller	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	July 28, 2009
/s/ James Schutz James Schutz	Vice President of Corporate Development, General Counsel and Secretary	July 28, 2009
/s/ Gregg Alton Gregg Alton	Director	July 28, 2009
/s/ Jay Edward Birnbaum Jay Edward Birnbaum	Director	July 28, 2009
/s/ Robert Burlingame Robert Burlingame	Director	July 28, 2009
/s/ Richard Conley Richard Conley	Director	July 28, 2009
/s/ Gregory M. French Gregory M. French	Director	July 28, 2009

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Exhibit Number	Description
5.1*	Legal opinion of Amy M. Trombly, Esq.
23.1*	Consent of Marcum LLP, independent registered public accounting firm.
23.2*	Consent of Amy M. Trombly (incorporated in Exhibit 5.1).

^{*} Filed herewith



1320 Centre Street, Suite 202 Newton, MA 02459

> Phone: 617-243-0060 Fax: 617-243-0066

July 28, 2009

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

Re: Registration Statement on Form S-1

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 Exchange Commission of a Registration Statement on Form S-1 (the "Registration Statement"), pursuant to which the Company is registering under the Securities Act of 1933, as amended, up to 554,000 units, comprised of (i) 554,000 shares (the "Shares") of its common stock, par value \$0.0001 per share (the "Common Stock") and (ii) 277,000 shares of Common Stock which are issuable by the Company upon the exercise of outstanding warrants (the "Warrants") to purchase shares of Common Stock (the "Warrant Shares"), which Shares and Warrant Shares may be sold from time to time on a delayed or continuous basis pursuant to Rule 415 under the Securities Act. 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, Amended and Restated Bylaws and such other records of the corporate proceedings of the Company and certificates of the Company's officers as I deemed relevant, as well as 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 me as originals, the conformity to original documents of all documents submitted to me as certified or photostatic copies and the authenticity of the originals of such copies.

Based on the foregoing, and subject to the limitations set forth below, I am of the opinion that:

- The Company has duly authorized 100,000,000 shares of Common Stock, of which 20,582,342 shares were issued and outstanding as of July 17, 2009.
- 2. The Shares (except for the Warrant Shares) have been duly authorized and, upon issuance and delivery against payment therefor, will be validly issued, fully paid and non-assessable.
- 3. The Warrants constitute valid and legally binding obligations of the Company under the laws of the State of California, as applied to contracts made and performed within such State, to issue the Warrant Shares assuming the holder has complied with the terms of the Warrants governing the obligation to issue such Warrant Shares.
- 4. The Warrant Shares have been duly authorized and, if and when the Warrants are exercised, provided that the Warrant Shares are subsequently issued and delivered by the Company pursuant to the terms of the Warrants and as described in the Registration Statement, the Warrant Shares will be validly issued, fully paid and non-assessable.

My opinion is limited to the laws of the State of California, solely as it relates to the third paragraph above, Delaware General Corporation Law, as currently in effect, including all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws, 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 based upon currently existing statutes, rules, regulations and judicial decisions, Following the closing of the offering as described in the Registration Statement, I disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

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-1 of our report dated June 10, 2009, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Oculus Innovative Sciences, Inc. and Subsidiaries as of March 31, 2009 and 2008 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, 2009.

/s/ Marcum LLP

Marcum LLP New York, New York July 28, 2009