
As filed with the Securities and Exchange Commission on August 16, 2006

Registration No: 333-_____

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

**FORM S-8
REGISTRATION STATEMENT**

**Under
The Securities Act of 1933**

DYADIC INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)



Delaware

(State or other jurisdiction of incorporation or organization)

45-0486747

(I.R.S. Employer Identification No.)

**140 Intracoastal Pointe Drive, Suite 404
Jupiter, Florida 33477**

(Address of Principal Executive Offices)

2006 Stock Option Plan

(Full Title of the Plan)

**Mark A. Emalfarb
President and Chief Executive Officer
Dyadic International, Inc.
140 Intracoastal Pointe Drive, Suite 404
Jupiter, Florida 33477**

(Name and address of agent for service)

Telephone No.: (561) 743-8333

(Telephone number, including area code, of agent for service)

Copy of communications to:

**Andrew E. Balog, Esq.
Greenberg Traurig, P.A.
1221 Brickell Avenue
Miami, FL 33131
Telephone No.: (305) 579-0500
Facsimile No.: (305) 579-0717**

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, \$0.001 par value per share	2,700,000	\$5.57	\$15,039,000	\$1,609

- (1) This Registration Statement also includes an indeterminate number of additional shares of Common Stock of the Registrant as may be issuable pursuant to the Plan as a result of stock splits, stock dividends or similar transactions in accordance with Rule 416 under the Securities Act of 1933.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act of 1933, based upon the average of the high and low prices of the Common Stock as reported on the American Stock Exchange on August 11, 2006.
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PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information specified in Part I will be sent or given to optionees under the Dyadic International, Inc. 2006 Stock Option Plan as specified by Rule 428(b)(1) promulgated by the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act").

Such documents will not be filed with the Commission in this Registration Statement, but constitute (along with the documents incorporated by reference into this Registration Statement pursuant to Item 3 of Part II hereof) a prospectus which meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Commission by Dyadic International, Inc. (the "Registrant") are hereby incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005;
- (b) The Registrant's Quarterly Reports on Form 10-QSB for the quarterly periods ended March 31 and June 30, 2006;
- (c) The Registrant's definitive Proxy Statement dated April 28, 2006 relating to the 2006 annual stockholders' meeting; and
- (d) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A (No. 001-32513), including any amendment or report filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated herein by reference and to be a part hereof from the date of filing of such documents with the Commission.

Any statements contained in this Registration Statement, or in a document incorporated or deemed to be incorporated by reference herein, shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which is also deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Certain legal matters with respect to the validity of the Common Stock offered hereby will be passed upon for the Registrant by Greenberg Traurig, LLP, of which an attorney currently beneficially owns in the aggregate 105,056 shares of Common Stock of the Registrant.

Item 6. Indemnification of Directors and Officers.

The Registrant's amended and restated certificate of incorporation provides that the Registrant shall indemnify its officers and directors in each and every situation where, under Section 145 of the Delaware General Corporate Law, as amended from time to time, or the DGCL, the Registrant is permitted or empowered to make such indemnification. The Registrant may, in the sole discretion of its board of directors, also indemnify any other person who may be indemnified pursuant to Section 145 to the extent the board of directors deems advisable, as permitted by Section 145.

Section 145 of the DGCL permits a corporation, under specified circumstances, to indemnify its directors, officers, employees or agents against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by them in connection with any action, suit or proceeding brought by third parties by reason of the fact that they were or are directors, officers, employees or agents of the corporation, if such directors, officers, employees or agents acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. In an action by or in the right of the corporation, indemnification may be made only for expenses actually and reasonably incurred by directors, officers, employees or agents in connection with the defense or settlement of any action or suit, and only with respect to a matter as to which they shall have acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made if such person shall have been adjudged liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine upon application that the defendant directors, officers, employees or agents are fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

The Registrant's amended and restated bylaws also contain provisions requiring the Registrant to indemnify its directors and officers to the fullest extent not prohibited by the DGCL or other applicable law. These bylaw provisions permit the Registrant to modify the extent of such indemnification by individual contracts with its directors and officers. However, the Registrant is not required to indemnify any director or officer in connection with any proceeding initiated by the person unless the indemnification is expressly required to be made by law, the proceeding was authorized by the board of directors of the Registrant, the indemnification is provided by the Registrant, in its sole discretion, pursuant to the powers vested in the Registrant under the DGCL or any other applicable law, or the indemnification is required to be made under other provisions in the bylaws. The bylaw provisions also empower the Registrant to indemnify its employees and other agents as set forth in the DGCL or other applicable law and to advance expenses to a director or officer in connection with proceedings upon receipt of an undertaking by or on behalf of the person to repay such amount if it is determined ultimately that the person is not entitled to be indemnified. The bylaw provisions generally follow the existing provisions of Section 145 of the DGCL.

The Registrant maintains directors' and officers' liability insurance covering its directors and officers in amounts customary for similarly situated companies.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

- 4.1 Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the Commission on September 30, 2004)
- 4.2 Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the Commission on September 30, 2004)
- 4.3 2006 Stock Option Plan (incorporated by reference to Annex B to the Registrant's definitive Proxy Statement dated April 28, 2006 relating to the 2006 annual stockholders' meeting)
- 5.1* Opinion of Greenberg Traurig, LLP
- 23.1* Consent of Ernst & Young LLP
- 23.2* Consent of Greenberg Traurig, LLP (included in legal opinion filed as Exhibit 5.1)
- 24.1* Power of Attorney (included as part of the signature page to this registration statement)

*Filed with this Registration Statement.

Item 9. Undertakings.

a. **The undersigned Registrant hereby undertakes:**

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.
2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment 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.
3. 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.

- 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) or 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.
- c. 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 Securities Act of 1933 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 whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 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 Town of Jupiter, State of Florida, on this 16th day of August, 2006.

Dyadic International, Inc. (Registrant)

By: /s/ Mark. A. Emalfarb
Mark A. Emalfarb
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark A. Emalfarb and Wayne Moor his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this Registration Statement, and to file the same, with exhibits thereto, and other documents to be filed in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signatures	Title	Date
<u>/s/ Mark A. Emalfarb</u> Mark A. Emalfarb	President and Chief Executive Officer (Principal Executive Officer) and Chairman of the Board of Directors	August 16, 2006
<u>/s/ Wayne Moor</u> Wayne Moor	Chief Financial Officer (Principal Financial and Accounting Officer)	August 16, 2006
<u>/s/ Glenn E. Nedwin</u> Glenn E. Nedwin	Director	August 16, 2006
<u>/s/ Richard J. Berman</u> Richard J. Berman	Director	August 16, 2006
<u>/s/ Harry Z. Rosengart</u> Harry Z. Rosengart	Director	August 16, 2006
<u>/s/ Robert B. Shapiro</u> Robert B. Shapiro	Director	August 16, 2006
<u>/s/ Stephen J. Warner</u> Stephen J. Warner	Director	August 16, 2006

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description of Exhibit</u>
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<u>No.</u>	
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