

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

**REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933**

Hybridon, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

04-3072298
(I.R.S. Employer
Identification No.)

345 Vassar Street
Cambridge, Massachusetts
(Address of Principal Executive Offices)

02139
(Zip Code)

1995 Director Stock Option Plan
(Full Title of the Plan)

Stephen R. Seiler
Chief Executive Officer
Hybridon, Inc.
345 Vassar Street
Cambridge, Massachusetts 02139
(Name and Address of Agent For Service)
(617) 679-5500
(Telephone Number, Including Area Code, of Agent For Service)

CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Offering Price Per Share | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee |
|--|-----------------------------------|--|--|-----------------------------------|
| Common Stock, \$0.001 par value per share (including the associated Preferred Stock Purchase Rights) | 400,000 shares | \$0.565(2) | \$226,000(2) | \$28.64 |

(1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the American Stock Exchange on May 26, 2004.

STATEMENT OF INCORPORATION BY REFERENCE

This Registration Statement on Form S-8 is filed to register the offer and sale of an additional 400,000 shares of the Registrant's common stock, \$0.001 par value per share, to be issued under the Registrant's 1995 Director Stock Option Plan. This Registration Statement incorporates by reference the contents of the registration statement on form S-8, File No. 333-03902, filed by the Registrant on April 23, 1996, relating to the Registrant's 1995 Director Stock Option Plan.

Item 1. Interests of Named Experts and Counsel.

Hale and Dorr LLP has opined as to the legality of the securities being offered by this registration statement.

Item 2. Exhibits.

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

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 Cambridge, Massachusetts, on this 28th day of May 2004.

Hybridon, Inc.

By: /s/ Stephen R. Seiler
Stephen R. Seiler
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Hybridon, Inc. hereby severally constitute and appoint Stephen R. Seiler and Robert G. Andersen, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Hybridon, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

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

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|--|--------------|
| <u>/s/ James B. Wyngaarden</u> James B. Wyngaarden, M.D. | Chairman of the Board of Directors | May 28, 2004 |
| <u>/s/ Stephen R. Seiler</u> Stephen R. Seiler | Chief Executive Officer and Director (Principal Executive Officer) | May 21, 2004 |
| <u>/s/ Sudhir Agrawal</u> Sudhir Agrawal, D. Phil | President, Chief Scientific Officer and Director | May 28, 2004 |
| <u>/s/ Robert G. Andersen</u> Robert G. Andersen | Chief Financial Officer and Vice President of Operations, Treasurer and Secretary (Principal Financial Officer) | May 28, 2004 |
| <u>/s/ Youssef El-Zein</u> Youssef El-Zein | Director | May 28, 2004 |
| <u>/s/ C. Keith Hartley</u> C. Keith Hartley | Director | May 28, 2004 |

| Signature | Title | Date |
|---|--------------|--------------|
| <hr/> <i>/s/ William S. Reardon</i> <hr/> William S. Reardon | Director | May 21, 2004 |
| <hr/> <i>/s/ Paul C. Zamecnik</i> <hr/> Paul C. Zamecnik, M.D. | Director | May 21, 2004 |

INDEX TO EXHIBITS

| Number | Description |
|--------|---|
| 4.1(1) | Restated Certificate of Incorporation of the Registrant |
| 4.2(2) | Amended and Restated By-Laws of the Registrant |
| 4.3(3) | Rights Agreement dated December 10, 2001 between Hybridon, Inc. and Mellon Investor Services LLC, as rights agent |
| 5.1 | Opinion of Hale and Dorr LLP, counsel to the Registrant |
| 23.1 | Consent of Hale and Dorr LLP (included in Exhibit 5.1) |
| 23.2 | Consent of Ernst & Young LLP |
| 24.1 | Power of attorney (included on the signature pages of this registration statement) |

(1) Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Registration Statement on Form 8-A, dated December 4, 2003 (File No. 001-31918) and incorporated herein by reference.

(2) Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Registration Statement on Form S-1, dated November 6, 1995, as amended (File No. 33-99024) and incorporated herein by reference.

(3) Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Registration Statement on Form S-2, dated October 10, 2003 (File No. 333-109630) and incorporated herein by reference.

HALE AND DORR LETTERHEAD

May 28, 2004

Hybridon, Inc.
345 Vassar Street
Cambridge, Massachusetts, 02139

Re: 1995 Director Stock Option Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 400,000 shares of common stock, \$0.001 par value per share (the "Shares"), of Hybridon, Inc., a Delaware corporation (the "Company"), issuable under the Company's 1995 Director Stock Option Plan (the "Plan").

We have examined the Certificate of Incorporation and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Hybridon, Inc.
May 28, 2004
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It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Hale and Dorr LLP

HALE AND DORR LLP

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 1995 Director Stock Option Plan of our report dated January 24, 2004 (except for Note 18, as to which date is February 2, 2004), with respect to the consolidated financial statements of Hybridon, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2003, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts
May 26, 2004