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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

American Superconductor Corporation

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

04-2959321 (I.R.S. Employer Identification No.)

64 Jackson Road, Devens, Massachusetts

(Address of Principal Executive Offices)

01434 (Zip Code)

2007 Stock Incentive Plan, as amended 2000 Employee Stock Purchase Plan, as amended (Full Title of the Plan)

Gregory J. Yurek
Chairman and Chief Executive Officer
American Superconductor Corporation
64 Jackson Road
Devens, Massachusetts 01434

(Name and Address of Agent For Service)

(978) 842-3000

(Telephone Number, Including Area Code, of Agent For Service)

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 $\ensuremath{\square}$

Accelerated filer o

Non-accelerated filer o

Smaller reporting company o

(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	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.01 par value per share	3,500,000 shares(2)	\$ 34.10(3)	\$ 119,350,000(3)	\$ 8,510

- (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) Consists of (i) 3,000,000 shares issuable under the 2007 Stock Incentive Plan, as amended and (ii) 500,000 shares issuable under the 2000 Employee Stock Purchase Plan, as amended.
- (3) 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 NASDAQ Global Market on October 29, 2010.

TABLE OF CONTENTS

SIGNATURES
INDEX TO EXHIBITS
EX-5
EX-23.2

Table of Contents

STATEMENT OF INCORPORATION BY REFERENCE

Except as otherwise set forth below, this registration statement on Form S-8 incorporates by reference the contents of (i) the registration statements on Form S-8, File No. 333-145685 relating to the registrant's 2007 Stock Incentive Plan, as amended, and (ii) the registration statements on Form S-8, File No. 333-111477 and File No. 333-58016 relating to the registrant's 2000 Employee Stock Purchase Plan, as amended.

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 Devens, Massachusetts, on this November 2, 2010.

AMERICAN SUPERCONDUCTOR CORPORATION

By: /s/ Gregory J. Yurek
Gregory J. Yurek
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of American Superconductor Corporation, hereby severally constitute and appoint Gregory J. Yurek, David A. Henry and John W. Powell, 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 American Superconductor Corporation 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.

Signature	Title	Date
/s/ Gregory J. Yurek Gregory J. Yurek	Director, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	November 2, 2010
/s/ David A. Henry David A. Henry	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	November 2, 2010
/s/ Vikram S. Budhraja Vikram S. Budhraja	_ Director	November 2, 2010
/s/ Peter O. Crisp Peter O. Crisp	_ Director	November 2, 2010
/s/ Richard Drouin Richard Drouin	Director	November 2 , 2010

Table of Contents

Signature	Title	Date
/s/ David R. Oliver, Jr. David R. Oliver, Jr.	Director	November 2, 2010
/s/ John B. Vander Sande John B. Vander Sande	Director	November 2, 2010
/s/ John W. Wood, Jr. John W. Wood, Jr.	Director	November 2, 2010

Table of Contents

INDEX TO EXHIBITS

Number	Description
5	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5)
23.2	Consent of PricewaterhouseCoopers LLP
24	Power of attorney (included on the signature pages of this registration statement)
99.1(1)	2007 Stock Incentive Plan, as amended
99.2(2)	2000 Employee Stock Purchase Plan, as amended

⁽¹⁾ Incorporated by reference to Exhibit 10.11 to the Annual Report on Form 10-K filed with the Commission on May 27, 2010 (File No. 000-19672).

⁽²⁾ Incorporated by reference to Appendix B to Definitive Proxy Statement for Annual Meeting filed with the Commission on June 22, 2009 (File No. 000-19672).

WILMERHALE LETTERHEAD

November 2, 2010

American Superconductor Corporation 64 Jackson Road Devens, Massachusetts 01434

Re: 2007 Stock Incentive Plan, as amended

2000 Employee Stock Purchase Plan, as amended

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 3,500,000 shares of common stock, \$0.01 par value per share (the "Shares"), of American Superconductor Corporation, a Delaware corporation (the "Company"), issuable under the Company's 2007 Stock Incentive Plan, as amended and 2000 Employee Stock Purchase Plan, as amended (collectively, the "Plans").

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 Plans, 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.

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 Plans, 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,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Peter N. Handrinos

Peter N. Handrinos, Partner

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated May 27, 2010 relating to the consolidated financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in American Superconductor Corporation's Annual Report on Form 10-K for the year ended March 31, 2010.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts November 2, 2010