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.)

114 East Main Street, Ayer, Massachusetts (Address of Principal Executive Offices)

01432 (Zip Code)

Amended and Restated 2007 Director Stock Plan (Full Title of the Plan)

John W. Kosiba, Jr.
Senior Vice President, Chief Financial Officer and Treasurer
American Superconductor Corporation
114 East Main Street
Ayer, Massachusetts 01432
(Name and Address of Agent For Service)

(978) 842-3000 (Telephone Number, Including Area Code, of Agent For Service)

Copy to:

Peter N. Handrinos Latham & Watkins LLP John Hancock Tower 200 Clarendon Street Boston, Massachusetts 02116 (617) 948-6000

5	hether the registrant is a large accelerated filer, an accelerated filer, a non-accel y. See the definitions of "large accelerated filer," "accelerated filer," "smaller report the Exchange Act.						
Large accelerated filer		Accelerated filer					
Non-accelerated filer	\boxtimes	Smaller reporting company	X				
		Emerging Growth Company					
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.							

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 150,000 shares of the common stock of American Superconductor Corporation (the "Registrant") to be issued pursuant to the Amended and Restated 2007 Director Stock Plan (the "Director Stock Plan"), for which Registration Statements of the Registrant on Form S-8 relating to the same employee benefit plan (as defined in Rule 405 of Regulation C under the Securities Act of 1933, as amended) are effective.

STATEMENT OF INCORPORATION BY REFERENCE

This Registration Statement on Form S-8 hereby incorporates by reference the contents of (i) the Registration Statement on Form S-8, File No. 333-145685, filed by the Registrant on August 24, 2007, (ii) the Registration Statement on Form S-8, File No. 333-197971, filed by the Registrant on August 8, 2014, (iii) the Registration Statement on Form S-8, File No. 333-213850, filed by the Registrant on September 28, 2016, and (iv) the Registration Statement on Form S-8, File No. 333-233531, filed by the Registrant on August 29, 2019, in each case relating to the Director Stock Plan.

Item 8. Exhibits.

INDEX TO EXHIBITS

Number	<u>Description</u>
4.1	Restated Certificate of Incorporation of American Superconductor Corporation, as amended (Incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-3 filed by the Registrant on September 13, 2013 (File No. 333-191153)).
4.2	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant, dated March 24, 2015 (Incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Registrant on March 24, 2015 (File No. 000-19672)).
4.3	Amended and Restated By-Laws of American Superconductor Corporation (Incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Registrant on February 1, 2021 (File No. 000-19672)).
5.1*	Opinion of Latham & Watkins LLP.
23.1*	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
23.2*	Consent of RSM US LLP.
24.1*	Power of attorney (included on the signature pages of this registration statement).
99.1	Amended and Restated 2007 Director Stock Plan (Incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed by the Registrant on August 5, 2022 (File No. 000-19672)).
107*	<u>Filing Fee Table</u>

^{*} Filed herewith.

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 Ayer, state of Massachusetts, on August 9, 2022.

AMERICAN SUPERCONDUCTOR CORPORATION

By: /s/ Daniel P. McGahn
Daniel P. McGahn
President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Each person whose signature appears below hereby constitutes and appoints Daniel P. McGahn and John W. Kosiba, Jr., and each of them singly, with full power to act without the other, such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign this registration statement and any and all amendments, including post-effective amendments to this registration statement, and to file the same, with exhibits and schedules thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary or desirable to be done in connection therewith as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes 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 by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Daniel P. McGahn Daniel P. McGahn	Chairman of the Board, President, and Chief Executive Officer (Principal Executive Officer)	August 9, 2022
/s/ John W. Kosiba, Jr. John W. Kosiba, Jr.	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	August 9, 2022
/s/ Arthur H. House Arthur H. House	Lead Independent Director of the Board	August 9, 2022
/s/ Laura A. Dambier Laura A. Dambier	Director	August 9, 2022
/s/ Margaret D. Klein Margaret D. Klein	Director	August 9, 2022
/s/ Barbara G. Littlefield Barbara G. Littlefield	Director	August 9, 2022
/s/ David R. Oliver, Jr. David R. Oliver, Jr.	Director	August 9, 2022

LATHAM&WATKINS LLP

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FIRM / AFFILIATE OFFICES Austin Munich Beijing New York Boston Orange County Brussels Century City Paris Riyadh San Diego Chicago Düsseldorf San Francisco Frankfurt Seoul Hamburg Shanghai Silicon Valley Hong Kong Houston Singapore London Los Angeles Madrid Tokyo Washington, D.C.

August 9, 2022

American Superconductor Corporation 114 East Main Street Ayer, Massachusetts 01432

Registration Statement on Form S-8; 150,000 shares of common stock, par value \$0.01 per share, of American Superconductor Corporation

To the addressee set forth above:

We have acted as special counsel to American Superconductor Corporation, a Delaware corporation (the "Company"), in connection with the registration by the Company of 150,000 shares of its common stock, \$0.01 par value per share (the "Shares"), issuable under the Company's Amended and Restated 2007 Director Stock Plan, as amended (the "Plan"). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on August 9, 2022 (the "Registration") Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the related prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the "DGCL") and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the recipients thereof, and have been issued by the Company for legal consideration in excess of par value in the circumstances contemplated by and pursuant to the Plan, and assuming in each case that the individual issuances, grants or awards

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under the Plan are duly authorized by all necessary corporate action and duly issued, granted or awarded and exercised in accordance with the requirements of law and the Plan (and the agreements and awards duly adopted thereunder and in accordance therewith), the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares in the DGCL.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of American Superconductor Corporation of our report dated June 1, 2022, relating to the consolidated financial statements of American Superconductor Corporation and its subsidiaries appearing in the Annual Report on Form 10-K of American Superconductor Corporation for the year ended March 31, 2022.

/s/ RSM US LLP

Boston, Massachusetts August 9, 2022

Calculation of Filing Fee Tables

Form S-8 (Form Type)

American Semiconductor Corporation

(Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount to be Registered (1)	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common						
	Stock,	Rule					
	\$0.01	457(c)					
	par	and					
	value per	Rule				\$92.70 per	
	share	457(h)	150,000 (2)	\$5.395(3)	\$809,250	\$1,000,000	\$75.02
Total Offering Amounts				\$809,250		\$75.02	
Total Fee Offsets (4)						\$0	
Net Fee Due						\$75.02	

⁽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 an additional 150,000 shares of Common Stock, par value \$0.01 per share (the "Common Stock"), of American Semiconductor Corporation (the "Registrant") issuable under the Registrant's Amended and Restated 2007 Director Stock Plan.

⁽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 Select Market on August 5, 2022.

⁽⁴⁾ The Registrant does not have any fee offsets.