

November 7, 2023

Wensheng Fan  
Chief Executive Officer  
Spectral AI, Inc.  
2515 McKinney Avenue, Suite 1000  
Dallas, Texas 75201

Re: Spectral AI, Inc.  
Registration

Statement on Form S-1

Filed October 30,

2023

File No. 333-275218

Dear Wensheng Fan:

Our initial review of your registration statement indicates that it fails in numerous material respects to comply with the requirements of the Securities Act of 1933, the rules and regulations thereunder and the requirements of the form. More specifically, please address the following:

Form S-1 requires that registrants which are smaller reporting companies file an audited balance sheet as of the end of each of the most recent two fiscal years, and audited statements of comprehensive income, cash flows and changes in stockholders' equity for each of the two fiscal years preceding the date of the most recent audited balance sheet.

Please refer to Rule 8-02 of Regulation S-X and amend accordingly.

Form S-1 also requires that registrants file a copy of the auditor's consent to the use of its audit report or an acknowledgment letter regarding the use of its review report in any filing under the Securities Act as an exhibit. Please refer to Item 601(B)(23) of Regulation S-K and amend accordingly.

We will provide more detailed comments relating to your registration statement following our review of a substantive amendment that addresses these deficiencies.

Please contact Juan Grana at 202-551-6034 or Jane Park at 202-551-7439 with any questions.

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Sincerely,

FirstName LastNameWensheng Fan  
Comapany NameSpectral AI, Inc.

Division of Corporation Finance  
Office of Industrial Applications and  
Services

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cc: Lynwood E. Reinhardt, Esq.  
FirstName LastName