

April 16, 2024

Peter M. Carlson
Chief Executive Officer
Spectral AI, Inc.
2515 McKinney Avenue, Suite 1000
Dallas, TX 75201

Re: Spectral AI, Inc.
Registration

Statement on Form S-1

Filed April 10,

2024

File No. 333-278610

Dear Peter M. Carlson:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Benjamin

Richie at 202-551-7857 with any questions.

Sincerely,

Division of Corporation Finance
Office of Industrial Applications and
Services

cc:

Herbert F. Kozlov