



DIVISION OF
CORPORATION FINANCE

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

February 20, 2024

Paul Warley
Chief Executive Officer
Ascent Solar Technologies, Inc.
12300 Grant Street
Thornton, CO 80241

**Re: Ascent Solar Technologies, Inc.
Registration Statement on Form S-1
Filed February 14, 2024
File No. 333-277070**

Dear Paul Warley:

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 Erin Donahue at 202-551-6063 with any questions.

Sincerely,

Division of Corporation Finance
Office of Manufacturing