



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 9, 2018

Charles D. Goodwin, II
Chief Executive Officer
Bovie Medical Corporation
5115 Ulmerton Road
Clearwater, Florida 33760

**Re: Bovie Medical Corporation
Registration Statement on Form S-3
Filed May 4, 2018
File No. 333-224677**

Dear Mr. Goodwin:

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 Tim Buchmiller at (202) 551-3635 with any questions.

Sincerely,

/s/ Tim Buchmiller for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Adam P. Silvers, Esq.
Ruskin Moscou Faltischek, P.C