



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3030

February 19, 2010

Andrew Makrides  
President, Chairman of the Board  
Bovie Medical Corporation  
734 Walt Whitman Road  
Melville, New York 11747

**Re: Bovie Medical Corporation**  
**Form 10-K for the fiscal year ended December 31, 2008**  
**Filed on March 16, 2009**  
**File No. 1-31885**

Dear Mr. Makrides:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Brian Cascio  
Accounting Branch Chief