

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

June 21, 2012

Via E-mail
Mr. Timothy P.V. Mammen
Chief Financial Officer
IPG Photonics Corporation
50 Old Webster Road
Oxford, Massachusetts 01540

RE: IPG Photonics Corporation

Form 10-K for Fiscal Year Ended December 31, 2011

Filed February 27, 2012 File No. 001-33155

Dear Mr. Mammen:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief