



DIVISION OF
CORPORATION FINANCE

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

June 11, 2015

Via Email

Timothy P.V. Mammen
Senior Vice President and 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, 2014
Filed March 2, 2015
File No. 001-33155**

Dear Mr. Mammen:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2014

Item 9A. Controls and Procedures, page 45

Management's Annual Report on Internal Control Over Financial Reporting, page 46

1. We note that Management's Annual Report on Internal Control Over Financial Reporting presented on page 46 does not identify the version of the Committee of Sponsoring Organizations of the Treadway Commission's Internal Control – Integrated Framework that was used to perform your assessment – i.e., whether the 1992 Framework or Updated Framework issued in 2013 was used. In future filings, please identify the version of the COSO Integrated Framework you used in the assessment. Please refer to Item 308(a)(2) of Regulation S-K and paragraphs 167(l) and (m) of PCAOB Auditing Standard No. 2.

Item 12. Security Ownership of Certain Beneficial Owners..., page 48

2. Please tell us why Dr. Valentin P. Gapontsev does not claim beneficial ownership of the shares held in each of the three trusts created by Dr. Gapontsev.

Financial Statements

Note 15. Geographic And Product Information, page F-22

3. We note from pages 7 through 9 that you offer a number of different products and in your earnings release you also discuss and quantify sales for different products. Please explain to us your consideration of the guidance in FASB ASC 280-10-50-40 with respect to revenues for each product.

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 Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

You may contact Andri Boerman at (202) 551-3645, or Julie Sherman, Senior Accountant, at (202) 551-3640 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Jay Mumford, Senior Attorney, at (202) 551-3637 with any other questions.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief