



DIVISION OF
CORPORATION FINANCE

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

September 4, 2013

Via E-mail

Chih-Hsiang (Thompson) Lin
President and Chief Executive Officer
Applied Optoelectronics, Inc.
13115 Jess Pirtle Blvd.
Sugar Land, TX 77478

**Re: Applied Optoelectronics, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed August 27, 2013
File No. 333-190591**

Dear Dr. Lin:

We have reviewed your registration statement 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 this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Inside Front Prospectus Cover

1. If you intend to depict products that you do not produce or that do not contain your products, it is unclear why you believe investors will not draw inappropriate conclusions regarding your business from your graphics. Please revise.

Management's Discussion and Analysis of Financial Condition, page 47

2. We note your response to prior comment 1; however, you continue to disclose company names, such as Genexis and Microsoft, without providing investors information to evaluate the extent of these companies' contribution to your business. Also, if other, unnamed companies contribute the same or more to your business, it is unclear why you believe that your disclosure is appropriately balanced. Please revise here and on page 80.

3. We note your response to prior comment 3. It is unclear why you could not disclose the number of design wins with appropriate explanation so that investors would not misinterpret the disclosure. We urge you to review carefully whether information about the number or nature of your design wins is disclosure that must be provided per Regulation S-K Item 303 and Rule 408. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the adequacy of the disclosures they have made. We remind you of the acknowledgements at the end of this letter that must accompany any request to accelerate the effective date of this registration statement.

Trends in the internet data center market, page 83

4. We note your response to prior comment 10. However, the revised disclosure in the first paragraph on page 84 does not clarify the extent of each identified entity's current contribution to your business. Therefore, please expand the disclosure in this section to discuss the extent of each identified entity's current contribution to your business.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed

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public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Praveen Kartholy, Staff Accountant, at (202) 551-3778 or Gary Todd, Accounting Reviewer, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc (via e-mail): Frank S. Wu, Esq.