



DIVISION OF  
CORPORATION FINANCE

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

May 1, 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.  
Confidential Draft Registration Statement on Form S-1  
Submitted April 4, 2013  
CIK No. 0001158114**

Dear Dr. Lin:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Summary, page 1

1. Please provide us support for your statements regarding your leadership throughout this prospectus, including statements regarding you being the second largest provider. Also, provide us support for your claims in:
  - the sentence that begins at the bottom of page 1 and continues on page 2,
  - the sentence that begins at the bottom of page 3 and continues on to page 4,
  - the last sentence of the first and fourth bullet points on page 76, and
  - the penultimate sentence of the fourth full bullet point on page 77,and ensure that your disclosure makes clear against whom you are comparing yourself.

2. Please provide us support for the market and industry data that you cite in the section entitled “Overview” on page 1 and in the section entitled “Industry Background” on page 2. Include support for your statement about the “only economic way to deliver the desired bandwidth.” Clearly mark the material you provide to identify the data you cite in your document, and tell us whether you commissioned any of the data disclosed in your prospectus other than the Ovum data mentioned on page 37.
3. Please tell us (1) what objective criteria you used to determine that the list of customers named in the first two full sentences on page 2 accurately represents your business and (2) whether you have identified each of the customers that satisfy these criteria. Do you derive a substantial portion of your revenue from each of the manufacturers other than Cisco? Do unnamed manufacturers contribute more revenue than any of the five manufacturers you name? Also tell us why you believe this level of detail is appropriate for a prospectus summary, and why you believe repeating this information on page 4 is appropriate for a summary.

In addition, please tell us how you chose which companies to name in the first full bullet point on page 3 and how you are aware of what compatibility issues are important to them.

4. If you believe it is appropriate to highlight the results mentioned at the top of page 2, please highlight with at least equal prominence the magnitude of your losses in the periods mentioned and your accumulated deficit.
5. With a view toward providing more specific information, please tell us when the “recent” shift mentioned in the third paragraph of your Overview began.
6. We note the amount of detail in your prospectus summary. We also note that you repeat much of this detail later in your prospectus. Please review the detail in your industry background, solutions, strength, and strategy sections of your prospectus summary to ensure that you have included only disclosure that is appropriate for a prospectus summary and not detail that overwhelms disclosure regarding the most significant aspects of the offering. Also, please tell us why you believe it is appropriate to highlight data in your prospectus summary and then, on page 37, tell investors not to place “undue weight” on the information you have chosen to highlight.
7. If a substantial portion of your business is attributable to a single country that creates risks like those you mention beginning on page 30, please prominently highlight in your prospectus summary the extent of your business in that country, including the portion of your operations and assets in that country and the extent of your revenue from that country. Ensure that this disclosure is highlighted clearly and not overwhelmed by detail that is inappropriate for a prospectus summary.

Summary Consolidated Financial Data, page 9

8. Please reconcile the amount shown as “Total stockholders’ equity (deficit)” on page 12 with the corresponding amount shown on your balance sheet on page F-3.
9. We note that you include non-recurring consultant fee as part of non-GAAP adjustments shown on page 11. Please tell us how you considered the guidance from Item 10(e)(1)(ii)(B) of Regulation S-K in concluding that these charges are non-recurring.

We are dependent on our key customers, page 13

10. Please tell us (1) the extent of your revenue from each of Arris Group and Motorola and (2) whether one of those companies primarily uses products from a competitor of yours.

We depend on key personnel, page 20

11. In an appropriately captioned risk factor, please explain the anti-takeover effect of the bank approval required for a change in your executive officers.

We may be involved in intellectual property disputes, page 26

12. Please clarify why you “cannot be certain that [y]our products would not be found infringing the intellectual property rights of others.” Have you not researched others’ intellectual property rights?

If we fail to maintain effective internal control, page 27

13. Please clarify why there can be no assurance that your internal controls will be able to avoid accounting errors as you state in the last paragraph of this risk factor. Are you not designing internal controls to provide that assurance?

As an “emerging growth company” within the meaning of the Securities Act, page 36

14. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Special Note Regarding Forward Looking Statements and Industry Data, page 37

15. Please file as an exhibit to this registration statement the consent of Ovum, Inc. that expressly states that Ovum consents to the quotation and summarization of its research included in your registration statement.

Use of Proceeds, page 38

16. Please tell us what portion of the proceeds will be used to repay debt and when the debt was incurred. Also disclose the portion of the proceeds that you intend to use for each of the purposes mentioned in the second sentence of the second paragraph. If you do not have a specific plan for a significant portion of the proceeds, please say so clearly and discuss the principal reasons for the offering.

Capitalization, page 39

17. Tell us, with a view toward disclosure in your filing, whether there are any contingencies associated with the assumed conversion of the preferred stock upon consummation of the offering. For instance, tell us whether there are contingencies related to the size of the offering, the offering price or the valuation assigned to the company.
18. The balance sheet on page F-3 identifies the preferred stock as “redeemable.” Please revise the capitalization table, the summary data on page 12 and any other similar disclosures to consistently identify the preferred stock as “redeemable.”

Dilution, page 41

19. Please revise to begin with actual net tangible book value per share and separately show the impact of the assumed conversion of preferred stock in arriving at pro forma net tangible book value per share.

Management’s Discussion and Analysis, page 45

20. We note your disclosure on page 46 regarding the significance of new design wins on your performance. Please provide us your analysis of why you believe Regulation S-K Item 303 and Rule 408 do not require that you disclose the number of new design wins in each period presented.

Revenue, page 47

21. Please provide us support for your statement in the last sentence on page 47 regarding your competitors.

Results of Operations, page 51

Comparison of Years Ended December 31, 2012 and 2011, page 54

22. Please expand to disclose the dollar amount of sales in each of your target end-markets, reconciled to total revenues for each of the periods discussed in MD&A. If material, please also quantify and describe the impact of changes in prices and changes in exchange rates on revenues. Also, address the underlying reasons for the \$1.2 million decrease in sales in other markets in 2012, including FTTH, where you anticipate revenues, as a percentage, will increase in the future.

Critical Accounting Policies and Estimates, page 66

Revenue recognition, page 67

23. Please revise to describe the nature, terms and conditions of sales through indirect channels referred to on page 85. Separately describe your revenue practices for those indirect channel sales. Also, clarify whether such sales are recorded on a gross or net basis and describe the factors you considered in arriving at your determination.
24. With respect to direct sales, if material to an understanding of your revenue practices, please expand to also address any post shipment obligations, return policies, refund rights or customer acceptance provisions and clarify how these matters are considered in your revenue recognition practices.

Stock-based compensation expense, page 67

25. Please file as exhibits the consents of the appraisers mentioned in the first paragraph of this section and in the second paragraph on page 69 as required by Rule 436.
26. Please tell us whether you have had any preliminary pricing discussions with your underwriters. If so, please tell us about the substance of those discussions and tell us whether those discussions were considered in determining the estimated fair value of your common stock.
27. Once pricing information is available, please revise to provide a specific discussion of each significant factor contributing to any significant difference between the estimated fair value of your common stock and the estimated offering price (or pricing range) for the 12 months prior to the contemplated offering. Please also disclose the aggregate intrinsic value of all outstanding options based on the midpoint of the estimated offering price range. Note that we are deferring final evaluation of share-based compensation until the estimated offering price is specified, and we may have further comments in that regard when you file an amendment containing that information.

28. With respect to the valuation performed in January 2013, please expand to describe the key assumptions that form the basis for your determination that the fair value of a share of your common stock was \$.25 in January 2013.
29. For the twelve months ended December 31, 2012, please expand for the following:
- Provide a table disclosing for each grant: the date of grant, the number of instruments granted, the exercise price, the fair value of the underlying stock, and the fair value of the instruments granted. This information may be summarized by month.
  - Provide a description of the methods and assumptions used in estimating the fair value of both the underlying stock and the instruments granted at each grant date. Describe the reasons for any significant changes in methods or assumptions during the year. Also, clarify whether the valuations were contemporaneous or retrospective and describe whether the valuations were performed by related parties.
  - Please update the disclosures for any significant grants after December 31, 2012.
30. We refer to the five year table of stock-based compensation on page 44. We note that while your revenues have significantly increased and your losses have significantly decreased over the past five years, expense recognized for stock-based compensation has steadily decreased over that period. With emphasis on the most recent three years, please provide us an analysis that fully explains the reasons for the steady decrease in the expense for stock-based compensation and that explains why these decreases are reasonable in light of the growth of your business during the periods presented in your filing. In that regard, describe to us:
- Any changes in methods or models applied over the period. If so, describe the reasons and the related impact on stock-based compensation.
  - Any changes in key assumptions or the methods used in arriving at those assumptions over the period. If so, describe the reasons and the related impact on stock-based compensation.

Industry Background, page 72

31. Please tell us the extent to which your products are in the Kansas City network that you mention in the third paragraph.

Continue to penetrate FTTH, page 78

32. In an appropriate section of your document, please balance your disclosure regarding the advantages of WDM-PON technology with any material challenges of the technology. Also clarify whether the WDM-PON technology is your proprietary property.

Differentiated semiconductor laser manufacturing, page 78

33. Please balance your disclosure of the advantages of the MBE process with any material disadvantages.

Our Products, page 80

34. Please tell us the criteria you used to determine which products to highlight on pages 81-83.
35. Please revise so that the terms you use here and throughout your prospectus are understandable. For example, we note your use of MSO, OEM, and ODM.
36. We note your disclosure on page 47 that your results are heavily dependent on your product mix during a period. We note other discussions of the effect of product mix in your document on pages 17, 55 and 59. Please provide the three-year revenue history by class of similar products or services as required by Regulation S-K Item 101(c)(1)(i) so that investors can see the changes in your product mix during those periods.

Patents, page 84

37. Please disclose the duration of your material patents.
38. In an appropriate section of your document, please disclose the duration of the licenses that you mention in the last risk factor on page 29. Also explain the portion of your business affected by those licenses.

Executive Officers and Directors, page 89

39. For each director, please discuss clearly the specific experience, qualifications, attributes or skills that led to the conclusion that the person should serve as a director for the registrant at this time in light of the registrant's business and structure.

Director Compensation, page 93

40. Please provide us your analysis of whether Regulation S-K Item 402(r)(3) or Item 404(a) require disclosure regarding the transactions mentioned in the first two paragraphs on page F-32.

Outstanding Equity Awards, page 99

41. Please provide the footnotes required by Instruction 2 to Regulation S-K Item 402(p)(2).

Agreements with Executive Officers, page 100

42. Please disclose the material terms of your agreements with your named executive officers. For example, we note section 4.B(iv) of exhibit 10.30.
43. Given your disclosure in the second clause (iii) in the second paragraph of this section, it appears the executives are entitled to separation payments upon almost any termination event. If so, please add an appropriate risk factor.

Various Incentive Share Plans, page 104

44. Given the last sentence of the penultimate paragraph on page 109 and the plans you filed as exhibits, it appears that vesting occurs when you report a material contract under Item 1.01 of Form 8-K. We note for example section 2.4 of exhibit 10.8. Please add an appropriate risk factor.

Loans from Stockholders, page 107

45. Please show us with specificity how you reconcile the disclosure in this section about stockholder notes with the information on pages F-3 and F-7 and in Note S on page F-32.

Private Placement of Securities, page 108

46. Please disclose in this section the re-pricing mentioned in the penultimate paragraph on page II-2 and the related transactions mentioned in last paragraph on page II-3. Also, clarify the number of shares purchased by each related person.

Description of Capital Stock, page 113

47. Your disclosure may not be qualified by reference to state law. Please revise accordingly.
48. Refer to the warrants to purchase preferred stock that you mention on page 7. Please disclose how the rights of your common stockholders are or may be limited or qualified by the preferred stock that those warrant holders can acquire.

Common Stock, page 113

49. With a view toward clarification of the last sentence of this section, please tell us whether exhibit 3.2 will provide that a majority of your outstanding shares are required for a director to be elected.



Material U.S. Federal Tax Considerations for Non-U.S. Holders, page 121

50. You may not disclaim responsibility for your disclosure. Please revise the first and second sentences of the last paragraph on page 124 accordingly. Also, tell us about the proposed changes mentioned in the last sentence of this section.

Relationships, page 128

51. Please provide more specific information regarding the transactions for which the underwriters “have received” compensation.

Financial Statements, page F-1

52. Please update the financial statements when required by Rule 3-12 of Regulation S-X.

Consolidated Balance Sheets, page F-3

53. Tell us why you believe it is appropriate to classify the redeemable preferred stock in permanent equity on your balance sheet. In that regard, please:
- Fully describe to us the terms and conditions of redemption. Please also describe those terms and conditions in financial statement Note N.
  - Tell us how inclusion of the redeemable preferred stock in permanent equity is appropriate under the guidance from FASB ASC 480-10-S50, -S99-1, S99-2 and S99-3.

Consolidated Statements of Operations, page F-4

54. Tell us why it is appropriate under the provisions of FASB Codification Topic 260 to assume conversion of the preferred shares in the determination of basic loss per share. In that regard, it appears that the assumed conversion of the preferred shares is anti-dilutive.
55. As a related matter, if conversion is certain to occur at the consummation of the offering, you may alternatively elect to present pro forma earnings per share assuming conversion of the preferred shares for the most recent year end and subsequent interim period. The notes to financial statements should describe the pro forma presentation and reasons for its inclusion in your filing.

Note B—Summary of Significant Accounting Policies, page F-8

Use of Estimates, page F-8

56. In light of the subjectivity and extensive estimation necessary to measure the fair value of your privately held equity and related equity compensation, tell us why stock compensation is not referred to in your “Use of Estimates” disclosure.

Concentration of Credit Risk and Significant Customers, page F-9

57. Tell us how your disclosure about significant customers provides the information content required by FASB ASC 280-10-50-42. Under the cited guidance, if revenues from transactions with a single external customer amount to 10 percent or more of a public entity's revenues, the public entity shall disclose that fact, the total amount of revenues from each such customer.

Inventories, page F-10

58. You disclose that you provide an “allowance” or “reserve” for the value of excess and obsolete inventories. With a view toward clarified disclosure, please tell us how your accounting policy considers the guidance from SAB Topic 5-BB and FASB ASC 330-10-35-14. Under the cited guidance, in the case of goods which have been written down below cost at the close of a fiscal year, such reduced amount is considered the cost for subsequent accounting purposes that cannot later be marked up based on changes in underlying facts and circumstances.

Note G—Fair Value of Financial Instruments, page F-17

59. Tell us why it is appropriate to classify notes receivable as level 1 in the fair value hierarchy. Explain how your determination considers the guidance from FASB ASC 820-10-35.

Note H—Notes Payable and Long-Term Debt, page F-18

60. Please expand Note H to clarify how the current portion of debt was determined. We note the disclosure in Note T that a portion of a line of credit was extended subsequent to year end.
61. Please disclose whether you were in compliance with debt covenants at December 31, 2012 and describe any instances of non-compliance.
62. Please revise to disclose how you accounted for the interest rate swap and the basis in GAAP for the accounting applied.

63. Please disclose the type of stock underlying the warrants issued to the Bank. Also, disclose the valuation assumptions, the grant date fair value and the expense recognized in each year presented. Clarify whether any of the warrants have been exercised, and if so, when exercise occurred.

Note I—Short-term Loans with Shareholders, page F-20

64. Please disclose how you valued and accounted for the preferred stock warrants granted in connection with the borrowings from shareholders. Disclose the valuation model, assumptions, the grant date fair value and how fair value of the warrants was recognized in your financial statements, initially and over the life of the debt.

Note L—Income Taxes, page F-21

65. Please disclose the domestic and foreign components of your pre-tax accounting income. Refer to Rule 4-08(h) of Regulation S-X.
66. In the rate reconciliation table, tell us the components of “other, net” in 2012.
67. With respect to the tax incentives in the PRC, tell us how your disclosure considers the guidance from SAB Topic 11-C. In that regard, if you have losses in foreign jurisdictions, such as the PRC, please disclose the amounts of any tax loss carry-forwards and the lives of those carry-forwards.
68. Tell us why you have not provided disclosure about uncertain tax positions pursuant to FASB Codification Topic 740.

Note M—Stock-Based Compensation, page F-23

69. With respect to your volatility assumption, tell us how you selected peer group companies and explain why you believe your selections are appropriate. Please refer to FASB ASC 718-10-55-25 and SAB Topic 14D.

3. Warrants, page F-29

70. Please revise to describe all material terms and conditions of the warrants, including but not limited to, vesting provisions, the terms and mechanics of cashless exercise and any contractual circumstances that could lead to changes in conversion or exercise prices or the number of equity instruments to be issued upon conversion or exercise. Refer to FASB ASC 815-40 and 505-10.

71. Disclose the assumptions used to value the warrants under the Black-Scholes option pricing model. Also, disclose the grant date fair value and the expense recognized in each year presented.
72. With respect to warrants on redeemable preferred stock, tell us how your accounting considers the guidance from FASB ASC 480-10-25-8 through 25-12 and FASB ASC 480-10-55-33. Explain to us how you determined that the warrants on redeemable preferred stock are not liabilities for accounting purposes.

Note O—Segment and Geographic Information, page F-29

73. We see that you manufacture products for three end markets and that your Chief Executive Officer receives information about product revenues in the financial information he reviews. Tell us why the notes to financial statements do not present disclosure of product line revenues pursuant to FASB ASC 280-10-50-40.
74. We note that you present enterprise-wide geographic disclosure about revenues based on the location of the particular manufacturing plant. Tell us the rationale for your determination that this presentation is a complete and meaningful application of the guidance from FASB ASC 280-10-50-41a. In that regard:
  - Tell us how you have disclosed total revenues from all domestic U.S. customers, and;
  - Describe why you believe that disclosure based on the location of your non-U.S. customers would not be more meaningful.

Recent Sales of Unregistered Securities, page II-3

75. Please show us how you reconcile the disclosure in this section with the information on page F-6 regarding issuance of stock for consultancy services.

Signatures, page II-5

76. Please revise to clarify who will be signing in the capacity of principal accounting officer or controller below the second paragraph of text required on the Signatures page when you file your Form S-1.

Exhibits

77. Please file all exhibits to exhibit 10.19.

Chih-Hsiang (Thompson) Lin  
Applied Optoelectronics, Inc.  
May 1, 2013  
Page 13

78. Please file a consent from your independent accountants with your first public filing in EDGAR. Afterwards, to the extent there is a delay in requesting effectiveness of your registration statement, or there is any change, other than typographical, made to the financial statements, or there have been intervening events since the prior filing that are material to the company, please provide a currently dated and signed consent from your independent accountants with subsequent publicly filed amendments.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

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.