



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

DIVISION OF
CORPORATION FINANCE

December 5, 2012

Via E-Mail

John K. Kibarian
Chief Executive Officer
PDF Solutions, Inc.
333 West San Carlos Street, Suite 1000
San Jose, California

**Re: PDF Solutions, Inc.
Form 10-K for the Fiscal Year ended December 31, 2011, as amended
Initially filed March 15, 2012
File No. 000-31311**

Dear Mr. Kibarian:

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 this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

General

1. The selected quarterly financial data called for by Item 8 of Form 10-K and your exhibit index are presented in your filing following the signature page, and are not listed in your Item 15(a) disclosure as required. In future filings, please ensure that your Item 8 disclosure includes (or properly incorporates by reference from elsewhere in the document) the disclosure required by Item 302 of Regulation S-K, and that your Item 15(a) disclosure is complete.

Item 1. Business

Customers, page 7

2. You disclose here that Global Foundries and Samsung represented 24% and 15%, respectively, of your total revenue for fiscal year 2011, and your Form 10-Q for the quarter ended September 30, 2012 discloses that your three top customers accounted for 39%, 21% and 12%, respectively, of your total revenue for the nine months ended September 30, 2012. In risk factors on page 10 of your Form 10-K, you further disclose that the loss of any of your key customers or a decrease in their manufacturing or sales could cause significant fluctuations in your results of operations because your expenses are fixed in the short-term and it takes a long time to replace customers. Please tell us, and disclose in future filings, the nature of your contractual relationship(s) with Global Foundries and Samsung, describing material provisions such as term and the material rights and obligations of the parties. Tell us whether performance under any single contract or series of similar contracts with either of these principal customers contributed in excess of 10% of your revenues for the most recent year. In addition, please tell us what consideration you gave to filing agreements with each of these principal customers as material contracts pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K. Please also address the foregoing matters with respect to IBM, which accounted for 19% of your 2011 revenues, to the extent there have been material changes in your arrangements with IBM since your prior response letter dated December 11, 2009 relating to your Form 10-K for the fiscal year ended December 31, 2008.

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.

John K. Kibarian
PDF Solutions, Inc.
December 5, 2012
Page 3

You may contact Melissa Walsh, Staff Accountant, at (202) 551-3224 or Stephen Krikorian, Accounting Branch Chief, at (202) 551-3488 if you have questions regarding comments on the financial statements and related matters. Please contact Katherine Wray, Attorney-Advisor, at (202) 551-3483 or me at (202) 551-3735 with any other questions.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs
Assistant Director