



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 26, 2016

Chris Diorio, Ph. D.
Chief Executive Officer
Impinj, Inc.
400 Fairview Avenue North, Suite 1200
Seattle, WA 98109

**Re: Impinj, Inc.
Amendment No. 3 to Draft Registration Statement on Form S-1
Submitted May 9, 2016
CIK No. 0001114995**

Dear Mr. Diorio:

We have reviewed your amended draft registration statement and have the following comment. In our comment, 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 comment applies 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 this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Quarterly Results of Operations, page 65

1. We note your revised disclosure on page 67 that the volume of reader-IC products shipped was lower in your first quarter of 2016 than in the prior quarter “as a result of normal variability in [y]our business.” Please describe this variability in an appropriate section of your prospectus and tell us why you do not believe this is indicative of a trend. On a related note, please explain to us why you believe it is appropriate to highlight throughout your prospectus your market share in reader IC unit volume given that product’s contribution to your product revenue. In your response, please address your multiple revisions to your prospectus reflecting a decrease in your market share of reader IC unit volume.

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You may contact Li Xiao at (202) 551-4391 or Brian Cascio, Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Michael Nordtvedt, Esq.
Wilson Sonsini Goodrich & Rosati, P.C.