



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

November 3, 2016

Via E-mail

George Laplante
Chief Financial Officer
Ambarella, Inc.
3101 Jay Street
Santa Clara, California 95054

**Re: Ambarella, Inc.
Form 10-K for Fiscal Year Ended January 31, 2016
Filed March 25, 2016
File No. 001-35667**

Dear Mr. Laplante:

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 Fiscal Year Ended January 31, 2016

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Provision for Income Taxes, page 52

1. We note the significant impact of the foreign tax rate differential and the overall low foreign effective tax rate in Note 13 on page 84. In future filings, please disclose and explain your foreign effective tax rate, including the primary taxing jurisdictions where your foreign earnings are derived, the relevant statutory rates and the impact of tax holidays.

Liquidity and Capital Resources, page 52

2. In future filings, to assist investors to better understand your liquidity position, please revise this section to disclose total cash and cash equivalents held at non-U.S. subsidiaries at each reported period. Clarify whether these funds are available for use in your operations in the United States without repatriation, and if so, discuss the strategies through which this is accomplished.

Item 8. Financial Statements

Note 13. Income Taxes, page 84

3. We refer to the reconciliation of the provision for income taxes to the theoretical provision at the U.S. statutory rate. Please describe to us the components of the item “non-U.S. foreign tax differential.” For instance, clarify whether you benefit from any tax holidays or abatements in any foreign jurisdiction.
4. We note that your operations are primarily conducted outside of the U.S. In future filings, please expand to describe the tax years that remain open for each major taxing jurisdiction. Refer to ASC 740-10-50-15e.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Andri Carpenter at (202) 551-3645 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or Tim Buchmiller, Senior Attorney, at (202) 551-3635 with any other questions.

Sincerely,

/s/Gary Todd for

Brian Cascio
Accounting Branch Chief
Office of Electronics and Machinery