



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

June 9, 2016

Via E-mail

Mr. Mark P. de Raad
Executive Vice President and Chief Financial Officer
Masimo Corporation
52 Discovery
Irvine, CA 92618

Re: Masimo Corporation
Form 10-K for the Fiscal Year Ended January 2, 2016
Filed February 24, 2016
Form 10-Q for the Quarterly Period Ended April 2, 2016
Filed May 4, 2016
File No. 001-33642

Dear Mr. de Raad:

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 the Fiscal Year Ended January 2, 2016

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

Gross Profit, page 60

1. In the last sentence of this discussion you present a non-GAAP measure, i.e., product gross profit margin including Cercacor eliminated royalty expenses, but we note that you did not provide any of the disclosures required by Item 10(e)(1) of Regulation S-K for that measure. To the extent that you continue to present similar non-GAAP measures in your future filings, please revise your presentations to fully comply with that guidance, including providing a reconciliation to the most directly comparable GAAP measure, a

statement disclosing the reasons why management believes the presentation is useful to investors and a statement disclosing any additional purposes managements uses the measure. This comment also applies to your Forms 10-Q.

Note 2. Summary of Significant Accounting Policies, page F-9

2. As previously requested in comment 1 of our letter dated May 21, 2015, please revise this note in future filings to disclose your accounting policy for loss contingencies. Refer to FASB ASC 235-10-50-1.

Form 10-Q for the Quarterly Period Ended April 2, 2016

Note 3. Variable Interest Entity (VIE)

Cercacor, page 15

3. Please describe to us the changes in the capital structure of Cercacor and in its contractual relationships with you that resulted in your conclusion that you are no longer its primary beneficiary and that you should deconsolidate Cercacor as of January 3, 2016. Explain to us in appropriate detail how these specific changes support your conclusion that you are no longer the primary beneficiary of the variable interest entity. Refer to the guidance provided in ASC 810-10, including ASC 810-10-35-4.

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.

Mr. Mark P. de Raad
Masimo Corporation
June 9, 2016
Page 3

You may contact David Burton at (202) 551-3626, or me at (202) 551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or Geoffrey Kruczek, Senior Attorney, at (202) 551-3641 with any other questions.

Sincerely,

/s/ Kevin J. Kuhar

Kevin J. Kuhar
Accounting Branch Chief
Office of Electronics and Machinery