



DIVISION OF
CORPORATION FINANCE

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

December 30, 2013

Via E-mail

Mr. Gabi Seligsohn, President and Chief Executive Officer
Nova Measuring Instruments Ltd.
Building 22, Weizmann Science Park
Rehovot P.O.B. 266
Israel

**Re: Nova Measuring Instruments Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2012
Filed March 11, 2013
File No. 0-30668**

Dear Mr. Seligsohn:

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 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 20-F for the Year Ended December 31, 2012

Note 9 – Income Taxes, page F-20

1. Please revise future filings to disclose the components of income (loss) before income tax expense (benefit) as either domestic or foreign. Refer to Rule 4-08(h) of Regulation S-X.

Note 10 – Geographic Areas and Major Customers, page F-23

2. We note your disclosure here regarding revenues by geographic area, including significant revenues attributed to Asia Pacific excluding Japan. If revenues from external customers attributable to any individual foreign country are material, please revise future filings to disclose those revenues separately. Please also revise future filings to disclose your basis for attributing revenues from external customers to individual countries. Refer to FASB ASC 280-10-50-41(a).

Mr. Gabi Seligsohn
Nova Measuring Instruments Ltd.
December 30, 2013
Page 2

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.

You may contact Gary Newberry at (202) 551-3761 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn
Accounting Branch Chief