



DIVISION OF
CORPORATION FINANCE

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

July 5, 2012

Via E-mail

Charles F. Wagner
Chief Financial Officer
Bruker Corporation
40 Manning Road
Billerica, MA 01821

**Re: Bruker Corporation
Form 10-K for the fiscal year ended December 31, 2011
Filed February 29, 2012
File No. 000-30833**

Dear Mr. Wagner:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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 10-K for the fiscal year ended December 31, 2011

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 39

Liquidity and Capital Resources, page 59

1. We note that over 80% of your revenue is generated from sales to customers in foreign countries. In future filings, if material to an understanding of your liquidity, please disclose the amount of cash and cash equivalents held by foreign subsidiaries. As relevant, please also describe the potential tax impact that could arise from repatriation of undistributed earnings of your foreign subsidiaries. We refer you to Item 303(a)(1) of Regulation S-K and Section IV of SEC Release 33-8350.

Item 9A Controls and Procedures, page 113

Changes in Control over Financial Reporting, page 113

2. Please reference the disclosure on page 17 related to the internal investigation and compliance matters. We see that in response to the FCPA investigation, you implemented an enhanced FCPA compliance program and strengthened the financial controls and oversight at subsidiaries operating in China and Hong Kong. Please tell us how you considered whether this represented a change in controls over financial reporting that should be disclosed under Item 9A. Please also tell us how you considered these matters in your assessment of internal control over financial reporting and disclosure controls and procedures at December 31, 2011.

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 Kristin Lochhead at (202) 551-3664 or Gary Todd at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3676 with any other questions.

Sincerely,

/s/Gary Todd for

Brian Cascio
Accounting Branch Chief