



DIVISION OF
CORPORATION FINANCE

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

July 15, 2011

Via E-mail

Mr. Jost Fischer, Chief Executive Officer
Sirona Dental Systems, Inc.
30-30 47th Avenue
Suite 500
Long Island City, New York 11101

**Re: Sirona Dental Systems, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2010
Filed November 18, 2010
File No. 0-22673**

Dear Mr. Fischer:

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 10-K for the Fiscal Year Ended September 30, 2010

Item 7. Management Discussion and Analysis of Financial Condition and Results of Operations,
page 26

Fiscal Year Ended September 30, 2010 compared to Fiscal Year Ended September 30, 2009,
page 29

1. We note your discussion of sales by segment and the segment information provided in footnote 23 of the financial statements. In future filings, please provide a discussion of the profitability and any material cash needs of your segments or tell us why such discussion is not required. Refer to Section 501.06.a. of the Financial Reporting Codification.

Selling, General and Administrative, page 30

2. We note from your disclosures on page F-11 the decline in warranty expense in relation to your reported revenue. In future filings, please provide a discussion of this and any other known trends, demands, commitments, events or uncertainties which are reasonably likely to have a material impact on the company's results of operations, or tell us why such discussion is not required. Refer to Item 303 of Regulation S-K.

Liquidity and Capital Resources, page 35

3. We note the amount of pre-tax foreign income and your policy of indefinitely reinvesting the earnings of your foreign subsidiaries on page F-23 and F-24. To the extent such amounts could be considered material to an understanding of your liquidity and capital resources, please revise your future filings to disclose the amounts of the cash and investment amounts held by your foreign subsidiaries that would not be available for use in the United States. Please further provide a discussion of any known trends, demands or uncertainties as a result of this policy that are reasonably likely to have a material effect on the business as a whole or that may be relevant to your financial flexibility. Refer to Item 303(a)(1) of Regulation S-K, Section IV of SEC Release 33-8350 and Financial Reporting Codification Section 501.03.a.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk, page 44

Exchange Rate Sensitivity, page 44

4. With regard to the table provided, please tell us:
 - why the table has no receivable amounts denominated in Euros,
 - why U.S. dollar receivables have exchange rate risk, and
 - why the total does not agree to the amount in your financial statements.
5. Please expand your disclosures in future filings to include foreign currency sensitive debt instruments such as the senior term loan denominated in Euros. Refer to Item 305 of Regulation S-K and General Instructions to Paragraphs 305(a) and 305(b) of Regulation S-K.

Notes to the Consolidated Financial statements, page F-9

Note 2 – Basis of presentation and summary of significant accounting policies, page F-9

Warranty expense, page F-11

6. Please tell us how the classification of warranty expense as part of selling, general and administrative expense conforms to the requirements of Rule 5-03(b)2 – 4 of Regulation S-X.

Note 4 – Employee Share-Based Compensation, page F-15

7. In future filings please provide all the disclosures required by paragraphs 718-10-50-2.c through d of the FASB Accounting Standards Codification.

Note 5 - Comprehensive Income, page F-18

8. Please provide a schedule showing the ending balance of each item of accumulated other comprehensive income in future filings. Refer to paragraph 220-10-55-15 of the FASB Accounting Standards Codification.

Note 10 – Income taxes, page F-21

9. Please revise future filings to disclose the amount of undistributed earnings of your foreign subsidiaries that are intended to be indefinitely reinvested in those operations in accordance with paragraph 740-30-50-2 of the FASB Accounting Standards Codification.

Note 13 – Long-term debt, page F-25

10. In future filings, please provide the actual rate of interest as of the balance sheet date for each debt obligation outstanding. Refer to Rule 5-02.22(a)(1) of Regulation S-X.

Note 20 – Net Other Operating Income and Restructuring Costs, page F-31

11. Please tell us how the classification of the exclusivity payment as part of Net Other Operating Income and Restructuring Costs conforms to the requirements of Rule 5-03(b)1.(a) of Regulation S-X.

Note 23 – Segment Reporting, page F-33

12. Please disclose the amount or percentage of revenue from each major customer individually in future filings. Refer to paragraph 280-10-50-42 of the FASB Accounting Standards Codification.

Form 10-Q for the Fiscal Quarter Ended March 31, 2011

Management Discussion and Analysis of Financial Condition and Results of Operations, page 23

Net Cash Provided by Operating Activities, page 31

13. We note from your statement of cash flows on page six that cash flows related to accounts receivable and inventories had a significant impact on your cash provided by operating activities. Please revise future filings to discuss material changes in the underlying drivers of your working capital changes to provide a sufficient basis for a reader to analyze the change. Refer to Item 303(a) of Regulation S-K and Release 33-8350.

Senior Facilities Agreement, page 31

14. In future filings, please provide a discussion of prospective information regarding the sources of funds to meet the cash needs of your senior term loans maturing on November 24, 2011. Refer to Item 303(a)(1) of Regulation S-K, Instructions 2 and 5 to Item 303(a), and Section 501.03.a. of the Financial Reporting Codification.

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. Jost Fischer
Sirona Dental Systems, Inc.
July 15, 2011
Page 5

You may contact Gary Newberry at (202) 551-3761 or Lynn Dicker, Reviewing Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

/s/ Lynn Dicker

Kevin L. Vaughn
Accounting Branch Chief