



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

October 27, 2009

Via U S Mail and FAX [(952) 930-5737]

Anthony P. Bihl, III
President and Chief Executive Officer
American Medical Systems Holdings, Inc.
10700 Bren Road West
Minnetonka, Minnesota 55343

**Re: American Medical Systems Holdings, Inc.
Form 10-K for the fiscal year ended January 3, 2009
Filed March 3, 2009
File No. 0-30733**

Dear Mr. Bihl:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments in all future filings with the Commission. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended January 3, 2009

Management's Discussion and Analysis

Critical Accounting Policies, page 36

1. In the interest of providing readers with a better insight into management's judgments into accounting for goodwill, please tell us and disclose the following in future filings:
 - Each of the valuation methodologies used to value goodwill (if multiple approaches are used), including sufficient information to enable a reader to understand how each of the methods differ, the assumed benefits of a valuation prepared under each method, and why management selected these methods as being the most meaningful for the company in preparing the goodwill impairment analysis;
 - How you weight each of the methods used including the basis for that weighting (if multiple approaches are used);
 - The results of your most recent impairment test and the percentage by which fair value exceeded carrying value as of the date of this test;
 - How your impairment test considered the significant decrease in your market capitalization at December 31, 2008;
 - The methods and key assumptions used in your valuation and how the key assumptions were determined;
 - The degree of uncertainty associated with the key assumptions. This discussion should provide specifics to the extent possible.

Item 11. Executive Compensation, page 44

2. We note from your disclosure under "Long-Term Incentive Compensation" that you have incorporated by reference from page 19 of your proxy statement that you determined the level of option grants based on a number of factors the primary one of which was individual performance. We do not see any analysis of the elements of individual performance which were considered in determining the amounts of the actual stock option grants nor do we see any analysis of how the stock option awards reflect such individual performance. Please provide such an analysis.

Note 6 Goodwill and Intangible Assets, page F-19

3. Please explain to us, and disclose in future filings, the nature of the trademarks that are amortized and the trademarks that are not amortized. Explain your basis for different accounting treatment for the trademarks.
4. We note that on page F-19 and in your Critical Accounting Policies on page 38 you have combined the description of the impairment test for long-lived assets and goodwill. Please separately discuss each of these tests in future filings.
5. Please explain to us, and disclose in future filings, the impairment test you performed for intangible assets in accordance with FASB ASC 360-10-35-17 and 21. You should also discuss the methodology and assumptions used in the assessment.
6. We note in the disclosures that, as a result of your assessment, you concluded that the carrying value of certain acquired developed technology intangible assets exceeded the undiscounted expected cash flows, and you recorded an additional \$17.1 million amortization expense. Please clarify that this represents impairment in the value of acquired developed technology intangible assets and provide the disclosures required by FASB ASC 360-10-50.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a response letter that keys your responses to our comments and provides any requested information. Confirm that you will comply with these comments in all future filings with the Commission. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments and the requested information.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed decision. 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.

Mr. Anthony P. Bihl, III
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In connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jeanne Bennett at (202) 551-3606, or me at (202) 551-3676, if you have questions regarding comments on the financial statements and related matters. Please contact Ruiari Regan at (202) 551-3269 or Timothy Buchmiller, Senior Attorney, at (202) 551-3635 with any other questions.

Sincerely,

Brian R. Cascio
Accounting Branch Chief