

Mail Stop 3030

April 3, 2009

Via U.S. Mail and Fax (585) 267-4819

Margaret V. Russell
Chief Financial Officer
Biophan Technologies, Inc.
15 Schoen Place
Pittsford, New York 14534

**Re: Biophan Technologies, Inc.
Form 10-K for the fiscal year ended February 29, 2008
Filed June 13, 2008
File No. 000-26057**

Dear Ms. Russell:

We have reviewed your filings and correspondence dated March 20, 2009 and have the following comments. Where indicated, we think you should revise your future filings in response to these comments. 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 comment or on any other aspects 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 February 29, 2008

Financial Statements

Consolidated Statements of Operations, page F-5

1. We note your response to the prior comment 5 in our letter dated February 27, 2009. Please tell us where you have disclosed in prior filings that it is your intention to sell intellectual property as a source of operating revenues. We note the disclosures in prior filings of your ownership of certain intellectual property and your ongoing efforts to develop certain technologies around MRI and other medical technology. We also note that you do not appear to have sold any intellectual property in prior periods. Your operating revenues to date relate primarily to license revenues and royalty payments. In light of this, please tell us why you believe that the sale of intellectual property constitutes your ongoing major or central operations. Please also address the following:
 - Tell us of any transactions that you had in prior years that were similar to the Medtronic transaction.
 - Tell us whether there have been any intellectual property sales in fiscal 2009 or if there are any pending sales.
 - Discuss how you concluded that the Medtronic sale constitutes ongoing operations rather than a nonrecurring gain. Tell us how this sale can be used as a basis for estimating future performance and assessing future cash flow prospects.
 - Tell us where you have disclosed your accounting policy for sales of intellectual property.
 - If you believe that the sale of intellectual property constitutes your ongoing major or central operations, please tell us why you continued to present your financial statements as those of a development stage company in fiscal 2008.

Form 10-Q for the Quarterly period ended November 20, 2008

Discontinued Operations, page 10

2. We note your response to the prior comment 29 in our letter dated February 27, 2009. Considering the receipt of shares is from Myotech, an entity that you consolidate, please clarify whether this entry to paid-in capital was eliminated in consolidation. We note in response to comment 6 that the issuance of shares to Myotech initially was reversed since it needed to be “eliminated in the consolidated financial statements.”

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 cover letter with your

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response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comments.

You may contact Praveen Kartholy, Staff Accountant, at (202) 551-3778 or me at (202) 551-3676 if you have questions regarding these comments and related matters. You may also contact Martin F. James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Brian R. Cascio
Accounting Branch Chief