



DIVISION OF
CORPORATION FINANCE

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

June 16, 2009

Via Facsimile (617) 526-5000 and U.S. Mail

Susan W. Murley, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, MA 02109

Re: Aspect Medical Systems, Inc.
Schedule TO-I
Filed June 8, 2009
File No. 5-59557

Dear Ms. Murley:

We have limited our review of the filing to those issues we have addressed in our comments below. Where indicated, we think you should revise the document 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.

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

Schedule TO-I

Exhibit 99(A)(1)(A): Offering Memorandum

Summary Term Sheet-Questions & Answers, page v

Who is eligible to participate..., page 2

1. You disclose that you may exclude employees located outside of the United States, “if, for any reason, we believe that their participation would be inadvisable or impractical...” You also note that you “reserve the right to withdraw the exchange offer in any jurisdiction...” Please note that the all-holders provision in Exchange Act Rule 13e-4(f)(8) applies equally to U.S. holders as well as non-U.S. holders. Refer to the interpretive guidance in section II.G.1. of SEC Release 33-8957. If you are relying on the global exemptive order applicable to employee stock option exchanges, please explain in your response letter how the exclusion of employees in certain foreign jurisdictions is related to a compensatory purpose, or revise to include them in the offer.
2. Your current offer provides a broad range of possible exchange ratios, each of which will be determined based on the closing price of the company’s common stock on the expiration date of the offer. Accordingly, as currently structured optionholders who tender in your offer will not know the new exercise price and the reduced number of options they will receive in exchange until the close of business on the expiration date. Thus, it appears that optionholders will not have knowledge of certain material terms of the offer (i.e. the exact exchange ratio) until approximately an hour or less before the expiration time of the offer. It does not appear that this structure is consistent with Item 4 of Schedule TO and corresponding Item 1004(a) of Regulation M-A. Please revise your offer or advise.
3. Please note our comment above. In revising your offer, please provide an analysis of how your revised offer will allow sufficient time for holders to consider whether to tender or withdraw following the announcement of the material terms of the offer (i.e. the exact exchange ratio). As the filing persons are aware, Rules 13e-4(f)(1)(ii) and 14e-1(b) of the Exchange Act require that you extend the offering period for any increase or decrease in the consideration offered so at least ten business days remain in the offer after the information is first sent to optionholders. If you do not intend to revise the offer in compliance with the time frame set forth in Rule 13e-4(f)(1)(ii), then provide us with a legal analysis explaining how your revised offer would comply with Rules 13e-4(f)(1)(ii) and 14e-1(b). Please cite to relevant no-action letters and/or other staff interpretative positions that you believe support your analysis.

Summary Term Sheet, page 1

Questions & Answers- Q. 15, page 5

4. We note the response to Q. 13 and the website referenced in the response to Q.15. Advise us of whether optionholders prior to the expiration time will be provided with a means (i.e. a web-based tool or other publicly accessible tool) that would enable them to ascertain the possible amount of new options they would receive based on hypothetical closing prices.

Section 14. Extension of offer; termination; amendment, page 31

5. Refer to the language in the second paragraph of this section. You may not terminate or amend an offer by giving only oral notice to option holders. Please revise to clarify.

* * *

As appropriate, please amend your filing in response to these comments. Please electronically submit a cover letter with your amendment that keys your responses to our comments. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all material information to investors. 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 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 filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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

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filings or in response to our comments on your filings.

Please direct any questions to me at (202) 551-3757 or, in my absence, to Christina Chalk, Senior Special Counsel, at (202) 551-3263. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

Melissa Campbell Duru
Special Counsel
Office of Mergers & Acquisitions