

Mail Stop 3561

April 25, 2007

Paul A Brooke
Chairman and Chief Executive Officer
Ithaka Acquisition Corp.
100 South Pointe Drive, 23rd Floor
Miami, Florida 33139

**RE: Ithaka Acquisition Corp.
Preliminary Proxy Statement
Amendment 1 Filed March 20, 2007
File No. 000-51362**

Dear Mr. Brooke:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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.

General

1. We reissue comment one from our letter of March 5, 2007. Neither your response letter nor amended proxy addressed various aspects of the Staff's previous comment. Accordingly, we reissue in part:

We note the amended requirement for investors to provide their certificates to the transfer

agent prior to the meeting and vote. Please explain the reason for requiring this before the meeting, when there is no guarantee that conversion will occur, and explain the basis for making this a requirement of conversion. Clarify the amount of time that will be provided between the mailing of the proxy and the date when the shares must be tendered for conversion rights. Please provide a detailed discussion of the risks to investors as a result of this change in the conversion terms.

Please advise or revise. If you feel you have already addressed these topics, please indicate the page(s) upon which such amended disclosure may be found. We may have further comment.

2. Provide clear disclosure as to the minimum amount of time that will be provided between the mailing of the proxy and the date when the shares must be tendered for conversion rights. Explain whether the minimum amount would be sufficient for an average investor to meet the steps required to exercise their conversion rights. Clarify why investors who attend the meeting are not able to tender their shares in person at the time of the meeting. We may have further comment.
3. We reissue comment two from our letter of March 5, 2007. We note your response that the you do not believe that the additional terms are inconsistent and that you do not believe the procedures outlined in the amended proxy statement (but not disclosed in your IPO prospectus) cause any liabilities to the company or its stockholders.

However, as noted in the preceding comment, above, the Staff believes there appear to be many details relating to conversion and risks to investors that result from the newly-announced requirement to tender certificates prior to the meeting date.

As noted before, these additional steps to conversion and apparent resultant risks were not set forth in the Form S-1.

Please disclose how these additional steps to conversion are consistent with the disclosure set forth in the Form S-1. If you conclude that they are not, please disclose the potential consequences, including any liabilities, to the company and its stockholders.

4. We reissue comment three from our letter of March 5, 2007. We note your response that you believe that there is only "a nominal cost associated with [the] conversion process."

However, the basis for such assertion is not clear, as you state that a "transfer agent will typically charge the tendering broker \$35 and it would be up to the broker whether or not to pass this cost on to the converting holder." Moreover, you do not address the possibility that a broker would charge for additional services, and you do not address why a charge limited to \$35 would be nominal in light of the \$6 original issuance price of the Ithaka units.

Accordingly, we reissue. Please clarify your disclosure to reflect whether there is any cost associated with tendering the physical shares or other requirements to elect conversion. For example, is there a cost associated with converting shares held in street name into physical shares? Provide clear disclosure regarding the costs associated with tendering the physical shares and any other requirements, fees, or steps to elect conversion. Clarify how these fees are allocated to shareholders. Will they be charged per account or per share? Clarify the percent of shares issued in the IPO that are held in "street name." We may have further comment.

5. We note that these additional steps will make it more difficult for investors to elect conversion and are more likely to result in shareholders potentially not meeting all of the requirements for conversion. Provide clear disclosure throughout the proxy statement.
6. Provide a more detailed discussion of the steps required for holders in "street name" to exercise their conversion rights. Discuss the minimum time frame that would be required for holders in "street name" to exercise their conversion rights.
7. Clarify the procedures whereby shareholders may obtain physical or electronic stock certificates and the process for electronic delivery to Ithaka's transfer agent
8. Please contrast your procedures for conversion with the conversion process of the traditional SPACs. Clarify whether any fees would be charged in the traditional SPAC conversion election where the shares are tendered after the business combination. We may have further comment
9. We reissue comment four from our letter of March 5, 2007. We note your response that your disclosure has been revised, but the Staff could find no such changes on the pages noted with respect to several of the matters raised by the Staff's previous comment. Accordingly we reissue in part.

We note the Form 8-K filed on December 6, 2006 includes a Revised Investor Presentation and indicates that the Investor Presentation will be distributed to the company's stockholders as well as other persons interested in purchasing Ithaka securities. We note that the company addresses a leveraged sales model indicating projections for 2007 (covering hospitals, installed systems, catheters/system/month, total catheters and average price/catheter) and an investment highlight of \$3 billion total addressable market worldwide based on intended future clearances and indications. It appears that this information maybe material to Ithaka's stockholders. We also note that the noted information dos not appear in the proxy statement filed on March 20, 2007. Please advise us or revise to make the appropriate changes. We may have further comment.

10. In connection with the preceding comment, we note the following added disclosure on page 115: "Alsius is targeting future operating margins of 20% or more and future gross

margins on its disposable catheters of 70% or more; however, its ability to achieve these results is subject to risks and uncertainties.”

The Commission encourages the use of projections, but there must be a reasonable basis for projections. Please disclose the reasonable basis that such results are achievable.

11. We reissue comment five from our letter of March 5, 2007. We note your response and the additional disclosure on page 64, particularly the following statement:

“The evaluation method used by the board, which is commonly used in the investing community, recognizes that the current value of a business is equal to the net present value of the long-term projected profit stream less the net present value of any incremental capital investment required to achieve such profit stream. In making this assessment, the board thus excluded the value of the capital that was expected to be provided by Ithaka to Alsius after the merger.”

However, the Staff notes that the disclosure added appears to only reinforce our prior comment, since you now disclose that the valuation of Alsius was based upon a valuation of “the net present value of the long-term projected profit stream” which itself is dependent upon “capital investment required to achieve such profit stream.” As a result, the valuation depends upon the consummation of the merger and availability of Ithaka funding.

Accordingly, we reissue. Please disclose how such an assumption is consistent with the disclosure in Ithaka's IPO prospectus, which indicated that the company acquired would have a value of at least 80% of net assets, not that the value of the assets would have a value of at least 80% if the transaction is consummated. To the extent that it is inconsistent, please disclose the potential consequences, including any liabilities, to the company and its stockholders. We may have further comment.

12. We reissue comment eight from our letter of March 5, 2007. We note your response that “the requested information has been added” to the proxy statement, but the Staff could not find the disclosure specifically requested.

Accordingly, we reissue. Please disclose the manner by which Mr. Brooke became aware of the MPM investments, including the date and name(s) of the parties from whom he was first made aware.

13. In connection with the preceding comment, we note the following disclosure added to page 51 of your proxy statement:

“Mr. Wheeler and Dr. Greene were aware that Mr. Brooke was an MPM Venture Partner and were aware of Mr. Brooke’s interests in the MPM funds that invested in Alsius. However, prior to the initiation of Ithaka’s discussions with Alsius and its financial

advisor, neither Mr. Wheeler nor Dr. Greene discussed with Mr. Brooke the MPM funds' investments in Alsius or the business of Alsius."

Please disclose with specificity the circumstances under which Mr. Wheeler and Dr. Green each became aware of the proposed business activities of Ithaka.

14. In connection with the preceding two comments, please clarify your disclosure to specifically identify the occurrence of all contacts Mr. Brooke had with any person related to MPM Capital and its related entities with respect to the proposed business activities of Ithaka.
15. We reissue comment 15 from our letter of March 5, 2007. We note your response centered on Mr. Brooke's role in the deliberative process and Mr. Brooke's financial interest in Alsius, but our comment was not only addressed to Mr. Brooke's role, but those of Mr. Wheeler and Dr. Greene as well, who we note are both general partners of MPM Capital and sit as MPM representatives on Alsius' board. In light of Mr. Brooke's status as director of Ithaka and a venture partner of MPM Capital at the time, we reissue.

Please clarify the basis for use of the term "arms-length" in your preliminary proxy.

16. We note the distinction made between general and venture partners of MPM Capital. Please disclose the differences between such roles.
17. Supplementally, advise us whether any of the funds advanced to Ithaka for offering expenses or the funds used to effect the open market warrant purchases by your directors came from MPM Capital or any of its related entities, directly or indirectly.

Summary, page 1

18. We reissue comment 21 from our letter of March 5, 2007, which was a reissuance of comment comment 21 from our letter of December 15, 2006. We note your response that additional disclosure has been added to the proxy statement but not all individuals were specifically identified. Accordingly, we reissue and expand.

In connection with the preceding comment, please affirmatively clarify the individuals/entities that would be considered for such payments, especially with respect to "consultants." Clarify the categor(ies) ("management, employees, non-employee directors, or consultants") in which each recipient is considered to be.

Ithaka Inside Stockholders, page 12

19. We note your response to comments 24 and 25. We also note that the company filed a

Form 8-K on April 5, 2007 that stated “On April 5, 2007, Ithaka Acquisition Corp. (“Ithaka”) announced that Paul Brooke, Ithaka’s Chairman of the Board and Chief Executive Officer, and Eric Hecht, Ithaka’s President and Chief Financial Officer, have entered into a written plan to purchase an aggregate of 200,000 shares of common stock of Ithaka pursuant to Rules 10b5-1 and 10b-18 of the Securities Exchange Act of 1934.” Please advise us whether Paul Brooke or Eric Hecht became aware prior to or on April 5, 2007 of any communications with respect to any stockholder’s intention to vote against the proposed transaction with Alsius. Also advise us whether either Paul Brooke or Erick Hecht were aware of any material nonpublic information regarding Ithaka prior to entering into the written plan to purchase 200,000 shares of common stock on April 5, 2007.

Alsius Bonuses, page 14

20. We note your response to comment 20. We also note your disclosure indicates that the boards believe that the bonuses structure is important to retain and incentivize management. Please revise to address why the bonuses are being paid to the consultants to Alsius.
21. We reviewed your response to our prior comment 28. Your response did not address our comment in its entirety, thus the comment will be partially reissued. Please revise your filing here and on pages 48 and 76 to clarify that only \$1.2 million of the \$3 million bonus is earned at the date of the transaction. Also, revise to disclose any recourse held by the company for the \$1.8 million in advance bonus payments (e.g. bonus paid upon closing, but employee does not fulfill service required through December 31, 2007).

Fairness Opinion, page 14

22. We reissue comment 29 from our letter of March 5, 2007. We note your response that “Capitalink does not view its consent to the fairness opinion being included with the proxy statement as intent to allow shareholders to rely on it directly and that it views the laws of Florida, which it asserts governs its engagement letter with Ithaka, to be controlling.

The Staff’s comment addresses the disclosure requirements under the Federal Securities laws. Accordingly, we reissue.

We note the statements in this section regarding the limitations set forth in the fairness opinion that the fairness opinion is addressed only to the board of directors. Because it is inconsistent with the disclosures relating to the opinion, the limitations in the fairness opinion should be deleted. We note in your response that Capitalink has consented to the fairness opinion being included with the proxy statement and therefore shareholders

should be able to rely upon such opinion. We may have further comment.

Escrow Agreement, page 15

23. We reissue comment 30 from our March 5, 2007 letter. The Staff's comment was not limited to Mr. Brooke's personal financial interest represented by his share of the MPM Capital funds. As a partner of MPM Capital at the time, it would appear that he owed fiduciary duties to MPM Capital as well as Ithaka and MPM Capital is to receive approximately 33.3% of the initial shares and 34.4% of the milestone shares to be issued by Ithaka.

Accordingly, we reissue. In this section, please provide a detailed discussion of the conflicts inherent in appointing Messrs. Brooke and Hecht to determine whether to assert an indemnification claim against Alsius and the escrow shares.

24. We reissue comment 31 from our March 5, 2007 letter. The Staff's comment was not limited to Mr. Brooke's personal financial interest represented by his share of the MPM Capital funds. As a partner of MPM Capital at the time, it would appear that he owed fiduciary duties to MPM Capital as well as Ithaka and MPM Capital is to receive approximately 33.3% of the initial shares and 34.4% of the milestone shares to be issued by Ithaka.

Accordingly, we reissue. In this section, please provide a detailed discussion of the conflicts inherent in your determination to set aside only 10% of the consideration shares as the sole remedy for the obligation of the security holders of Alsius to indemnify and hold harmless Ithaka for any damages, whether as a result of any third party claim or otherwise.

25. We note your statement that Messrs. Brooke and Hecht would be liable for approximately \$350,000 if they have to pay the debts and obligations. We also note you indicate that as of March 8, 2007 you had accounts payable and accrued expenses of \$639,859 and negative working capital of \$(550,027). Please confirm the amount of the estimated liability if Brooke and Hecht personally pay the debts and obligations to vendors and other entities that are owed money.

Risk Factors, page 27

26. We note your response to comment 36 from our letter of March 5, 2007, especially the added disclosure that Alsius conducts no formal studies and has no way of precisely determining how much of its products are used for off-label applications.

Our prior comment centered on revenues, not use, as your initial disclosure described

revenues from such off label use as “significant.”

Please clarify in this section how you may describe the revenues earned from such off-label use as "significant" when you also disclose that you have "no way of ascertaining such revenues."

Additionally however, and in light of your revised disclosure to include use, please clarify whether Alsius has ever conducted, commissioned, or sponsored any analysis of such off label use, whether formal or not, and clarify whether any estimates have ever been prepared, by Alsius or any other party, whether precise or not, with respect to both use and revenues.

27. We note that Alsius’s contract with Euromed will terminate in May 2007 and that Alsius will enter into a new contract with Euromed that will cover Austria but not Germany. Please revise to indicate Euromed’s sales volume to Germany as a percentage of Alsius’s revenue for 2006.
28. We reviewed your response to our prior comment 37. Your response did not address the risk identified in our comment, thus the comment will be reissued. Please revise to provide a risk factor to address the fact that the warrant holders may not be able to exercise the warrants during the 30-day period (i.e. notice period) prior to the redemption date as a prospectus may not be current and the warrants may not be exercisable during that period.

Background of the Merger, page 49

29. We note your statement that “at around this time, Mr. Brooke and Mr. Wheeler had a phone conversation during which they discussed the potential structure of an acquisition transaction” Please revise to indicate when Mr. Brooke and Mr. Wheeler had the phone conversation.

Comparable Company Analysis, page 69

30. We reissue comment 49 from our letter of March 5, 2007. We note your added disclosure that “Capitalink noted that none of the comparable companies discusses the off-label use of its products in its most recent filings.” Please clarify at this point that Alsius considers revenues generated from off-label sales to be “significant,” as you do elsewhere in your proxy statement.

Additionally, please disclose whether Capitalink considered whether such potential liabilities should be reflected in its determination that the set of companies compared was

appropriate, especially in light of Alsius' view that "significant" revenues were generated by off-label use.

31. We reissue comment 50 from our letter of March 5, 2007. We note your response that you have revised the disclosure regarding to this comment in connection with the revisions made regarding comment 49, however the Staff could locate no changed disclosure that addressed comment 50 on page 70 as your response indicates. Please advise.

Accordingly, we reissue.

We note the disclosure on page 70 that all of the comparable companies are larger than Alsius in terms of revenue. Disclose how management determined that comparisons with such companies would be relevant in light of Alsius' revenues being, at best, 2.3 times less than the smallest of the comparables and, at worst, 113.8 times smaller than the largest of the noted comparables.

Material Federal Income Tax Consequences of the Merger, page 72

32. We note your statement that "this discussion is intended to provide only a general summary of the material United States federal income tax consequences of the merger" (Emphasis added.) Please revise to delete the term "general" from the description of the tax consequences.

Alsius Bonuses, page 76

33. We note on page 77, Renee Kerr, Former Vice President of Finance, is included in the bonus pool. Please revise the disclosure to address her current status (e.g. employee, consultant, etc.).

Alsius Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 129

34. We reviewed your response to our prior comment 52. Your revised disclosure did not address our comment in its entirety, thus the comment will be partially reissued. In order to further an investor's understanding of your cost of revenues, please revise to disclose the percentage of cost of revenue attributed to fixed and partially fixed costs in your discussion of variances between the years ended December 31, 2005 and 2004.

Alsium Financial Statements

Notes to Financial Statements

Note 17 – Subsequent Events, F-27

35. For each outcome presented, please revise to disclose the fair value of the warrants to be issued to Merrill Lynch Capital, including the methodology used and related assumptions, and their impact on your financial statements. Please revise Alsium's MD&A on page 131 accordingly.

Annex E – Capitalink Fairness Opinion

36. We note the statement made in the fairness opinion that "we do not express any opinion as to the underlying valuation ... of Ithaka or Alsium" We also note a similar statement in the Fairness Opinion section in the proxy statement. We do not understand how Capitalink can opine that the aggregate consideration is fair from a financial point of view and that the fair market value of Alsium is at least equal to 80% of the net assets of Ithaka given the statement that no opinion is expressed as to the valuation of Alsium. Revise the fairness opinion as appropriate. We may have further comment.
37. Please revise the last paragraph of the fairness opinion to clarify that Capitalink has consented to the use of the opinion in the proxy statement.

Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

Paul A Brooke
Ithaka Acquisition Corp.
April 25, 2007
Page 11

You may contact Brian Bhandari (202) 551-3390 if you have questions regarding comments on the financial statements and related matters. Questions on other disclosure issues may be directed to John Zitko at (202) 551-3399, or David Link, who supervised the review of your filing, at (202) 551-3790.

Sincerely,

John Reynolds
Assistant Director

cc: David Miller (by facsimile)
212.818.8881