Room 4561

August 9, 2006

Mr. Kenneth Ferry President and Chief Executive Officer iCAD, Inc. 4 Townsend West, Suite 17 Nashua, New Hampshire 03063

Re: iCAD, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed July 31, 2006 File No. 1-09341

Dear Mr. Ferry:

This is to advise you that we have limited our review of the above filing to the matters addressed in the comments below. 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Proposal I, Approval of Option Exchange Program, page 24

- 1. Please provide us your analysis as to whether this proxy statement regarding your prospective option exchange program constitutes a pre-commencement communication subject to the filing requirements set forth in Rule 13e-4(c) under the Exchange Act. Please also see the instructions to Rule 13e-4(c) and our July 2001 supplement to our July 1997 manual of publicly available telephone interpretations for additional guidance.
- 2. It appears that your proposal seeking approval for your option exchange program falls within the disclosure requirements of Item 12 of Schedule 14A. Accordingly, please

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review your disclosure to ensure that all necessary disclosure requirements have been addressed. In particular, we note that disclosure required by Item 13(a) of Schedule 14A pursuant to Item 12(f) does not appear to have been provided. Please revise or advise us otherwise.

- 3. Please disclose the price of a share of your common stock as of a recent practicable date. Please also elaborate on the basis for the determination of \$2 per share as the exercise price for the prospective new options.
- 4. We note that all prospective new options will be vested upon grant. Please briefly discuss the vested status of the existing options.
- 5. Please elaborate on your statement on page 29 that the value of existing options is expected to be greater than or equal to the value of the prospective new options to be granted. In light of the lower exercise price for the new options, it would appear that the new options would be of greater value than the existing options with higher exercise prices.

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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 supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Exchange Act and that they have provided all information investors require for an informed investment 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.

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

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> 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 connection with our review of your filing or in response to our comments on your filing.

You may contact Daniel Lee at (202) 551-3477, or Jeff Werbitt at (202) 551-3611, with any questions. If you need further assistance, you may contact me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs Assistant Director