

Mailstop 6010

October 4, 2007

Daniel T. Mongan, Vice President
ICx Technologies, Inc.
2100 Crystal Drive, Suite 650
Arlington, Virginia 22202

**Re: ICx Technologies, Inc.
Form S-1, Amendment No. 1
File No. 333-145135
Filed September 21, 2007**

Dear Mr.Mongan:

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 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Prior comment refers to our letter dated August 31, 2007.

Prospectus Summary, page 1

1. As previously requested, please furnish copies of all market studies and other third-party information, including statistics and market information disclosed in *Industry Overview* at pages 2 and 68. Clearly mark the relevant information that supports your disclosure. A listing of references to sources "available online" does not provide adequate specificity and identification for the data you present. Please provide a supplemental cross-reference to the related information within the prospectus disclosure.

2. Please replace the first page of Annex 2 of the materials furnished with a legible copy. The data reproduced in the table at the top of the page is indistinct and too small to read.

Elements of Compensation, page 99

3. Please revise to quantify the 2007 increase in the Chief Executive Officer's equity compensation. Further, revise to explain the difference in the stated annual salary for 2006 of \$280,000, and the actual salary figure of \$374,615 shown in the summary compensation table.
4. We refer to prior comment 16 and your response and reissue the comment in part. Please explain material differences in compensation decisions with respect to individual named executive officers. For example, we note the option awards granted to your chief executive officer as compared to the awards granted to your other named executive officers, and the varied amounts of bonuses.
5. Explain and describe how an officer's seniority and current equity ownership were used in determining the form and amount of compensation.

Certain Relationships and Related Party Transactions, page 113

6. Disclose the total dollar amount invested by the entities affiliated with Wexford Capital LLC for its 75.9% ownership of the registrant.
7. Please quantify the payments to be made to Messrs. Mills and Kobler "based on the net profits realized by the Wexford entities...including their investments in us." If based upon a formula, describe the formula.
8. Refer to prior comment 20 and your response. Disclose the aggregate dollar valuation for each acquisition.

Preferred Stock, page 119

9. Clarify the new disclosure to state definitively whether the preferred stock will convert prior to this initial public offering.

Chilkoot Design, Ltd. Unaudited Financial Statements, page F-319

Balance Sheet, page F-320

10. Please refer to prior comment 42. We note your response to our comment and amendment to the filing. We see that you have restated the presentation of your equity method investees which resulted in changes to your assets, liabilities, stockholders' equity and equity earnings in investee income. Please reconcile for us the amounts originally recorded and recognized with the amounts as currently presented. Please detail for us the reason for the revised presentation. Furthermore, please tell us why you have not disclosed the restatement (and the impacts thereof on your financial statement line items) in the footnotes to your financial statements and presented the disclosures and headings identifying the amounts as restated in accordance with APB 20. We may have further comment after reviewing your response. Please provide us a similar analysis for the following statement of equity method investee presentations:

- Davidson Technologies Ltd., page F-335
- Peter Boudreau & Associates Ltd., page F-351

As appropriate, please amend your registration statement in response to these comments. 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.

You may contact Kevin Kuhar at (202) 551-(202) 551-3662 or Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris at (202) 551-3601 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy A. Fisher
Assistant Director

cc. Michael J. Danaher, Esq.
VIA FAX (650) 493-6811