

Mail Stop 4720

August 19, 2009

Horst Zerbe  
Chief Executive Officer  
IntelGenx Technologies Corp.  
6425 Abrams  
Quebec, H4S 1X9

**Re: IntelGenx Technologies Corp.  
Registration Statement on Form S-1  
Filed August 12, 2009  
File No. 333-161305**

Dear Mr. Zerbe:

We have limited our review of the above referenced registration statement to only the issues identified herein. 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.

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.

Cover Page

1. Please remove the common shares underlying the warrants that will be issued upon the exercise of the special warrants sold in the Canadian Private Placement from this registration statement. As these shares underlie warrants that are not currently outstanding, they cannot be registered for resale at this time.
2. Please remove the additional securities that may be issued as a penalty in the event the Company fails to meet its registration obligations in connection with the July 2009 Private Placement from this registration statement. You may register these shares in the event the penalty applies.

3. We note several inconsistencies among the fee table, the cover page and the prospectus summary as to the total number of securities being offered in connection with this registration statement. After complying with comments 1 and 2 above, please reconcile these inconsistencies in all places where appropriate to clearly state the total number of shares that will be registered and provide a clear breakdown of the specific categories of securities.
4. It is unclear as to whether the penalty discussed in the registration statement applies to the U.S. Private Placement or the Canadian Private Placements, or both. Our confusion may relate to the differing definitions of "July 2009 Private Placement." On the cover page you state that the July 2009 Private Placement is defined as the "private placement completed on July 13, 2009." However, on page 4 you then define the July 2009 Private Placement as both the U.S. Private Placement and the Canadian Private Placement collectively. The U.S. Private Placement was completed on July 22, 2009, not July 13, 2009. Please revise to clarify and ensure that the defined term is used appropriately throughout the filing.

The Offering, page 3

5. We note your statements on page 3 and 30 that Paradigm Capital Inc., Bolder Investment Partners Ltd. and Union Securities Ltd. acted as placement agents for the Canadian Private Placement. However, footnotes to the Selling Security Holders table on page 29 indicate that Haywood Securities Inc., Haywood Securities Inc. ITF Bolder Investment Partners Ltd., Haywood Securities Inc. ITF Woodstone Capital Inc. and RWG Holdings Ltd. received placement options as compensation for services in relation to the Canadian Private Placement. Please reconcile these inconsistencies.

Item 16. Exhibits and Financial Statements, page 45

6. Please file as an exhibit to your registration statement the legal opinion listed as Item 5.1 in your exhibit list opining as to each of the securities included in the offering.

\* \* \*

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.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Horst Zerbe  
IntelGenx Technologies Corp.  
August 19, 2009  
Page 4

Please contact Laura Crotty at (202) 551-3563, Suzanne Hayes, Legal Branch Chief, at (202) 551-3675, or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler  
Assistant Director

cc: Richard Raymer  
Hodgson Russ LLP  
150 King Street West, Suite 2309  
Toronto, Ontario M5H 1J9