



DIVISION OF  
CORPORATION FINANCE

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

November 9, 2011

Via E-mail

Avner Gal  
Chief Executive Officer  
Integrity Applications Inc.  
P.O. Box 432  
Ashkelon 78100, Israel

**Re: Integrity Applications, Inc.  
Amendment No. 2 to Registration Statement on Form S-1  
Filed October 27, 2011  
File No. 333-176415**

Dear Mr. Gal:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Liquidity and Capital Resources, page 32

1. We note your response to prior comment 7. Please disclose the Israeli Consumer Price Index on the date the loan was made and on the most recent date practicable.

Principal and Selling Shareholders, page 55

2. Revise the prospectus to state, as disclosed in your response to prior comment 12, that the tax ruling by the Israeli Tax Authorities will not have any effect on any selling shareholder's ability to sell shares pursuant to the registration statement because the ruling did not apply to the shares to be sold.
3. We note your response to prior comment 13. Please disclose, if true, that at the time of the purchase of the securities to be resold, each seller had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

Item 16. Exhibits, page II-3

4. Regarding your response to prior comment 14, it appears that the exhibits include only the form of agreement. We therefore reissue our comment.
5. Please note that we may have further comments after you file the enclosures you mention in response to prior comment 18.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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 you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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You may contact Julie Sherman at (202) 551-3640 or Jay Webb, the accounting reviewer, at (202) 551-3603 if you have questions regarding the financial statements and related matters. Please contact Gabriel Eckstein at (202) 551-3286 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz  
Assistant Director

cc (via E-mail): Robert L. Grossman, Esq.  
Greenberg Traurig, P.A.