



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

May 11, 2010

VIA U.S. MAIL and FACSIMILE (832) 442-3027

Mr. Gary E. Ball
Chief Executive Officer, President
Infrared Systems International
15 North Longspur Drive
The Woodlands, Texas 77380

**RE: Infrared Systems International
Form 10-K for the fiscal year ended September 30, 2009
Filed December 18, 2009
File No. 333-147367**

Dear Mr. Ball:

We have reviewed your response dated April 12, 2010 and have the following comments. Where indicated, we think you should revise your document in response to these comments and comply with the remaining comments in all future filings. If you disagree, we will consider your explanation as to why our comments are 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.

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.

Form 8-K dated April 16, 2010

Form 8-K dated April 21, 2010

1. We note from your disclosure in the 8-K dated April 16, 2010 that on April 14, 2010 IFRS sold 11,557,217 shares of common stock, representing 89.9% of the outstanding stock of IFRS immediately after the transaction, to TFE for a purchase price of \$200,000, consisting of \$30,000 cash and a promissory note for \$170,000. It appears that TFE is wholly owned by Propalms and William Wright. We also note from your disclosure in the 8-K dated April 21, 2010 that on April 19, 2010 the registrant closed on the acquisition of a 100% interest in the stock of Focus Systems, Inc. ("Focus") from Propalms, making Focus a wholly owned subsidiary of the registrant. To help us understand the impact these transactions will have on your financial statements please provide us with the following:
 - Please tell us how you plan to account for the abovementioned transactions, including an explanation on how these transactions will be reported in the registrant's respective financial statements. As part of your response, please fully explain to us if you will account for the transactions as an acquisition or reverse acquisition, including your rationale for your conclusion.
 - Please tell us how your accounting supports the terms and changes in ownership structure as specified in the underlying contracts for each of the aforementioned transactions.
 - Tell us which entity is the accounting acquirer and accounting acquiree, and your rationale that supports such conclusion.
 - Please tell us the method used to value the accounting acquiree.

Form 10-K for the year ended September 30, 2009

Financial Statements, page

Note 5. Definite Lived Intangible Assets, page 23

2. It appears from your response to our prior comment 1 that you have not generated revenue from the technology underlying the pending patent. In this regard, tell us how you reasonably concluded that the pending patent will generate revenue for its entire 20 year life from the date of filing the application.
3. Please refer to our prior comment 3. Please tell us how you considered each of the eight rejections from the patent office as part of your impairment analysis.
4. It appears from your response to our prior comment 2 that the only patent costs capitalized, which sums to the definite-life intangible asset amounts reported on page 17 and 23 are attorney fees paid to prepare the patent application and

responses to the U.S. Patent Office. Please tell us why these costs are not more in line with research and development costs encompassed by FASB ASC 730-10, which shall be charged to expense when incurred.

Acknowledgements

5. Please provide the previously requested acknowledgements signed by an officer of the company.

As appropriate, please 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 amendments to expedite our review. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please submit your cover letter on EDGAR. Please understand that we may have additional comments after reviewing your 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 Exchange Act of 1934 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 filings;
- 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
- 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 our review of your filing or in response to our comments on your filing.

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You may contact Julie Sherman at (202) 551-3640 or me at (202) 551-3212 with any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Jeff Jaramillo
Accounting Branch Chief