



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

February 10, 2011

Stephen Dresnick  
Chairman and Chief Executive Officer  
Internal Fixation Systems, Inc.  
5901 SW 74<sup>th</sup> Street, Suite 408  
South Miami, FL 33143

**Re: Internal Fixation Systems, Inc.  
Amended Registration Statement on Form S-1  
Filed February 7, 2011  
File No. 333-170008**

Dear Mr. Dresnick:

We have reviewed your amended 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.

If we are unable to successfully..., page 3

1. We note your response to prior comment 1. It is unclear how you are able to conclude that the risks of the two separate procedures (screw only and plate/screw) are identical. Specifically, given the limited tolerance for incongruity between the plates and screws, it would appear that the production of plate/screw sets may expose you to increased risks related to design or manufacturing defects. Please advise.

Future sales of our common stock..., page 13

2. Please expand this risk factor to discuss the specific risks presented to you by the significant number of restricted shares that will become eligible for future sale. Your current discussion appears to describe only a generic risk.

Industry Overview, page 16

3. We note your response to prior comment 4 which indicates that industry data more recent than 2008 is very costly to obtain. However, this response appears to confirm that the data contained in the prospectus is not the most recent available data. Please tell us how the use of this data is consistent with your obligations to present information that is current as of the date of the prospectus. In this regard, note that it remains unclear how your review of the public filings of two of your competitors substantiates the data in the prospectus as you suggest in your response.

Competition, page 18

4. While we note your response to prior comment 5, your disclosure continues to reference reduced production times. Specifically, we note that you disclose here and on page 16 that your proprietary modifications to the CNC Swiss-Turn machine reduce manufacturing steps and eliminate post-production processing steps. We also note that the prospectus continues to reference time savings on page 12. Please clarify and substantiate this disclosure or remove it.

Holders, page 20

5. We note that the information in this section is provided as of September 30, 2010. Please update your disclosure. Make similar revisions elsewhere in the registration statement where disclosure is not current, including, for example, under "Security Ownership of Certain Beneficial Owners and Management."

Current and Future Financing Needs, page 26

6. Please consider revising your disclosure in this section for clarity. In this regard, you may wish to consider organizing your disclosure into a bulleted list of your obligations setting forth the amounts, due dates and relevant call features, if any. Ensure that similar disclosure appearing elsewhere in the prospectus, including the risk factors on pages 7 and 8 and in the third paragraph on page 38, is also clear and understandable to investors.

Selling Security Holders, page 34

7. We note your response to prior comment 12 and reissue in part. Please tell us each selling shareholder's relationship to the company and file the September 2010 private placement agreements, including the service agreement(s) with Larry and Neal Moskowitz and any registration rights agreements. In addition, please tell us whether the services provided by Larry and Neal Moskowitz in exchange for their shares have been completed.
8. Please tell us why shares were sold to Evan and Ian Moskowitz on September 15, 2010 for \$.10 per share and to Larry and Neal Moskowitz for \$.20 per share, when shares were sold to other investors on that same date for \$.50 per share. To the extent that the shares were underlying certain convertible securities described under Sales of Unregistered Securities on page 20, please revise to clarify.

Certain Relationships...., page 36

9. You have disclosed in response to prior comment 17 that your manufacturing and equipment sub-leases with Mr. Hernandez's company were entered into by you as part of your separation agreement with Mr. Hernandez. Please disclose whether the terms of these leases are similar to those you would have received in non-related party transactions.
10. We note that your revised disclosure refers to office space in Medley, Florida. However, your discussion of properties on page 19 does not appear to mention this property. Please advise.
11. We note that the \$185,000 promissory note is payable to Star Medical Equipment Rental, Inc. Please revise the prospectus to disclose, if true, that Mr. Hernandez is not the payee of this note and to clarify the relationship between Mr. Hernandez and Star Medical Equipment Rental, Inc.
12. We note your response to prior comment 18; however, it appears that you have deleted the reference contained in your prior amendment to the revenue milestones set forth in the \$185,000 promissory note, rather than disclosed them as requested. Please revise to disclose in your next amendment the milestones and call features related to your loans and promissory notes.
13. In the third paragraph of this section, you state that your chief executive officer has personally guaranteed two of your equipment leases. While we note the personal guarantee filed as exhibit 4.6, please tell us where you have filed the second personal guarantee.

14. We note your response to prior comment 20 and reissue the comment in part. Please disclose the identity of the surgical facilities referenced in the eighth paragraph of this section.
15. Please revise the same paragraph to clarify whether Dr. Carbonell is a director of the surgical facility or Internal Fixation Systems. If the latter, please make appropriate revisions elsewhere in the prospectus, including at page 27 under "Directors, Executive Officers, Promoters and Control Persons", to disclose that Dr. Carbonell is a director of the company.
16. Please disclose when the note held by Ms. Cattabrigga was exchanged for a convertible debenture. We also note that Ms. Cattabrigga does not appear on the list of promissory note holders in Exhibit 4.1 or debenture holders in Exhibit 4.2. Please advise.
17. Refer to the penultimate paragraph of this section. Please describe for us the non-cash transaction through which Mr. Chris Endara, Mr. Matt Endara and Mr. Ken West repaid the cash advances they received from the company. Please also disclose the terms of the advances and the amount of any excess.

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 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.

You may contact Dennis Hult at (202) 551-3618 or Jay Webb, Staff Accountant, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

Amanda Ravitz  
Assistant Director

cc (by facsimile): Leslie Marlow, Esq. – Gracin & Marlow LLP