



DIVISION OF  
CORPORATION FINANCE

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

January 7, 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 December 22, 2010  
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.

Facing page

1. Please revise to remove your reference to another “electronic medium.” Note that shares must, among other things, be quoted on the OTC Bulletin Board or listed on an exchange in order to be sold at prevailing market prices. Other electronic mediums are not acceptable. Revise your prospectus, including your plan of distribution, accordingly.

Risk factors, page 2

2. We note your response to prior comment 10. However, please tell us what you mean by management information systems and enterprise resource planning systems. We may have further comment after we review your response.

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

3. Please revise to clarify, if true, that plates cannot be secured with generic screws. Alternatively, if they can be secured with generic screws, please explain why it is necessary for you to manufacture plates. In addition, please address whether you face additional risks by manufacturing plates used in medical procedures rather than limiting your products to screws.

We have no audit committee, page 5

4. We note your response to prior comment 38. Please revise the heading of this risk factor to disclose that you do not have an audit committee financial expert.

We may incur additional indebtedness, page 7

5. We note your response to prior comments 7 and 12. With a view to disclosure, please tell us how the shareholders agreement was terminated. If there is a written agreement, please provide it to us.

Industry Overview, page 16

6. Please provide us with copies of reports of the U.S. Consumer Product Safety Commission and the U.S. Census Bureau, as requested in prior comment 15.
7. We note your response to prior comment 16; however, it is unclear how you determined that the relevant data has not changed since 2007. Please expand your analysis to explain. Alternatively, please take and describe for us the appropriate steps necessary to confirm that the information you have cited remains accurate.

Competition, page 18

8. Please clarify the function of the CNC Swiss-Turn machine. For example, please explain whether the machine is used to create screws, plates or other products.

Sales of Unregistered Securities, page 20

9. Please disclose the number of persons you reference in the second paragraph as an insubstantial number of persons.
10. Please tell us why you deleted the issuances of 1,520,000 and 480,000 shares in May 2010 from your disclosure in this section. Also, reconcile your disclosure that you issued 1,999,000 shares to five individuals in April 2010 with your disclosure on page II-2.

Management's Discussion and Analysis or Plan of Operation, page 22

Critical Accounting Policies, page 22

11. We note your response to comment 25. However, it remains unclear to us why you consider many of your accounting policies to be critical accounting policies. Also, we do not see any revisions to your accounting policy disclosures that discuss the nature of estimates and uncertainties about the estimates inherent to each individual policy and how different assumptions, methods or conditions might affect your financial statements. For example, it is not clear why you list the Accounting Standards Codification, your cash policy and shipping and handling charge policy as critical. Also, you did not revise the Accounts Receivable, Property and Equipment, Intangible Asset, and Impairment of Long-Lived Assets, to explain why you consider them to be critical accounting policies. The disclosures merely repeat the policies from your significant accounting policy footnote without elaboration. Accordingly, your disclosure does not conform to our expectations for the critical accounting policies disclosure. For each identified critical accounting policy, please revise the disclosures herein to describe the specific factors that in your view makes each critical. Also, discuss the nature of estimates and uncertainties about those estimates inherent to each individual policy, including how you make those estimates. Finally, discuss how different assumptions, methods or conditions might affect your financial statements. For further guidance, please refer to SEC interpretive Release No. 33-8350.

Results of Operations, page 24

12. We note that your discussion and analysis for selling, general and administrative expenses (SG&A) merely lists the significant components of SG&A, which an investor can readily determine by looking at the financial statements. In order to more clearly comply with Item 303 of Regulation S-K, quantify each individually significant factor contributing to changes in your financial statement line items to the extent practicable and explain why that factor changed. Management's assessment as to how these changes are expected to affect future operations should also be presented where possible. For example, explain why sales commissions increased during the nine months ended September 30, 2010 while during the same period sales revenues decreased and discuss whether you believe this trend will continue.
13. We note the significant increase in inventory disclosed in your interim balance sheet and your discussion of the reasons for part of this increase in the penultimate paragraph on page 24. Please expand your disclosure to quantify and clearly explain all of the reasons for the referenced increase in inventory.

Liquidity and Capital Resources, page 25

14. Please expand your disclosure in response to prior comment 28 to describe more clearly your plans to raise at least \$500,000.

Directors, Executive Officers..., page 26

15. You do not appear to have provided us objective support for your claims regarding Stephen Dresnick's award as healthcare entrepreneur of the year by USA Today and Nasdaq, as requested in prior comment 31; therefore, to that extent we reissue the comment.

Advisory Board

16. The status of your advisory board remains unclear from your response to prior comment 37. If you do not have an advisory board please state that clearly in your response and explain why you disclosed previously that you had such a board. If you do have an advisory board, please provide the disclosure requested in our prior comment.

Executive Compensation, page 29

17. Please revise the total column for Kenneth West's compensation in the table added in response to prior comment 40.

Selling Security Holders, page 33

18. It remains unclear how you determined that the proposed offering may be characterized as a secondary offering. Please expand your response to prior comment 43 to address: the percentage of your shares held by non-affiliates that are being registered; the percentage of shares being sold that were acquired in the bridge loan financing; the terms of the acquisition of the remaining shares by your selling shareholders; the length of time such shares have been held; and whether at the time such shares were acquired by each selling shareholder there was any agreement, understanding or arrangement, directly or indirectly, with any person to resell the shares.

Certain Relationships and Related Transactions, page 36

19. Please reconcile your disclosure regarding your sub leases of facilities and equipment from related parties on page Q-10 with your revised disclosure in this section.

Certain Relationships and Related Transactions, page 36

20. We note your response to prior comment 44 and reissue the comment. Please disclose all material terms of your related party transactions, including duration, termination provisions, interest rates and other relevant provisions. Refer to Item 404 of Regulation S-K.

Rule 144, page 38

21. It remains unclear how you determined that 1,000 shares may be sold under Rule 144 given the requirements in rule 144(c)(1). Please advise or revise.

Financial Statements, September 30, 2010, page Q-1

Statements of Operations, page Q-3

22. We note you presented the line item "Anti-diluted (loss) earnings per share." Please delete this line item from this statement or tell us how your presentation complies with U.S. GAAP, including FASB ASC 260.

Recent Sales of Unregistered Securities, page II-1

23. Please reconcile your revised disclosure in this section that in September 2010, you issued 155,500 shares to 44 individual investors with the statement of changes in stockholders' equity on page Q-4 of your interim financial statements.

Exhibits

24. It appears that the amended exhibit 3.1 contains only the amendment and not the entire amended articles of incorporation; therefore we reissue prior comment 69.
25. Refer to prior comment 70. If you elect to rely upon instruction 2 to Item 601 of Regulation S-K you must provide the schedule required by that Instruction for each exhibit filed under that instruction. Please revise.
26. Please tell us why you have not filed the guarantees by your chief executive officer as requested in the second bullet of prior comment 71.
27. Please clarify what exhibits represent:
- the instruments governing the advances from former shareholders disclosed in notes 6 and 10 to your audited financial statements on pages F-11 and F-14;
  - the refinanced loan disclosed in Note 10 on page F-14;
  - the bridge loans disclosed in the last paragraph on page 20.

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.

Stephen Dresnick  
Internal Fixation Systems, Inc.  
January 7, 2011  
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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): Hank Gracin, Esq.