



DIVISION OF
CORPORATION FINANCE

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

May 15, 2012

Via E-mail

Brian Tuffin
Chief Executive Officer
Fuse Science, Inc.
6135 NW 167th Street, #E-21
Miami, Florida 33015

**Re: Fuse Science, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed April 17, 2012
File No. 333-179682**

Dear Mr. Tuffin:

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.

General

1. We note your revision to the document in response to comment 3 of our comment letter dated March 20, 2012 where you state that "at no time, however, will the Conversion Price be reset below \$0.12 per share as a result of a conversion price adjustment." Please revise your disclosure to provide tabular disclosure, similar to the second table on page 15, of the total possible profit the selling stockholders could realize if the conversion price is adjusted to \$0.12. Please provide the same tabular disclosure for the warrants. Finally, please revise the second table on page 16 accordingly.
2. We note your response to comment 6 of our comment letter dated March 20, 2012 and the revised disclosure that does not appear complete. We will continue to

monitor for an update relating to the requested disclosure.

3. We note your response to comment 8 of our comment letter dated March 20, 2012 and the revised disclosure that you intend, and have a reasonable basis to believe, that you will have the financial ability to make all payments with respect to the financing. We further note that you had no revenue during the three month period ended December 2010 or 2011 and that, at December 31, 2011, you had a cash balance of \$160,465 and current liabilities of \$844, 471. Please tell us your basis for believing that you will have the financial ability to make all payments with respect to the financing.
4. We note your response to comment 9 of our comment letter dated March 20, 2012. Please clarify for us whether Mission Product Holdings, Inc. is affiliated with you or any selling shareholder. In addition, please file the licensing and distribution agreements with Mission Product Holdings, Inc. as an exhibit to the registration statement.
5. We note your response to comment 10 of our comment letter dated March 20, 2012. Please revise the document by inserting an appropriate heading over the revised disclosure on page 17.
6. We note that you are registering the sale of 110,165,174 of shares of common stock. Given the size relative to the number of shares outstanding held by non-affiliates, the nature of the offering and the selling security holders, the transaction appears to be a primary offering. Because you are not eligible to conduct a primary offering on Form S-3 you are not eligible to conduct a primary at-the-market offering under Rule 415(a)(4).

If you disagree with our analysis, please advise the staff of the company's basis for determining that the transaction is appropriately characterized as a transaction that is eligible to be made under Rule 415(a)(1)(i). In your analysis, please address the following among any other relevant factors:

- The number of selling shareholders and the percentage of the overall offering made by each shareholder;
- The date on which and the manner in which each selling shareholder received the shares and/or the overlying securities;
- The relationship of each selling shareholder with the company, including an analysis of whether the selling shareholder is an affiliate of the company;
- Any relationships among the selling shareholders;

- The dollar value of the shares registered in relation to the proceeds that the company received from the selling shareholders for the securities, excluding amounts of proceeds that were returned (or will be returned) to the selling shareholders and/or their affiliates in fees or other payments;
- The discount at which the shareholders will purchase the common stock underlying the convertible notes (or any related security, such as a warrant or option) upon conversion or exercise; and
- Whether or not any of the selling shareholders is in the business of buying and selling securities.

Selling Stockholders, page 23

7. We note your selling shareholder table on page 24 and the disclosure in footnote 2. We further note that you are registering 110,165,174 shares of your common stock for sale by the selling shareholders. It does not appear that all of the 110,165,174 shares are reflected in the table. Please tell us specifically how you determined the shares to be included in the table, provide total columns in the table and reconcile these share amounts with the total number of shares you are registering.
8. We note your response to comment 11 of our comment letter dated March 20, 2012. Please revise your disclosure to include footnote 12 or advise.

The Offering, page 7

9. We note your disclosure where you state that the common stock offered hereby involves a high degree of risk and should not be purchased by investors who cannot afford the loss of their entire investment. At the end of this section, please include a summary of the most significant risks of investing in your shares.

Cautionary Note Regarding Forward-Looking Statements, page 5

10. We note your response to comment 14 of our comment letter dated March 20, 2012. Please remove references to Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

Recent Developments, page 11

11. We note your disclosure on page 11 and 18 about the consummation and generation of gross proceeds from the January 2012 Financing and the February 2012 Financing. Please explain to us how these financings and related proceeds are reflected in your

financial statements.

Risk Factors, page 18

12. We note your response to comment 22 of our comment letter dated March 20, 2012. Please revise this section to describe the risks relating to not yet having patents for your proprietary technology.

Historical information, page 36

13. We note your response to comment 24 of our comment letter dated March 20, 2012 and re-issue the comment in its entirety. Please reconcile your disclosure here with the disclosure in Part II of the registration statement under “Recent Sales of Unregistered Securities” and explain how you determined that the convertible notes have the face amount of \$1,200,000.

Fiscal Year Financial Statements

Note 1.(b) Acquisitions and Business, page F-9

14. We note your response to comment 28 of our letter dated March 20, 2012. You indicate that the 24% interest in Newco held by Leonard Adler was converted into 67% of your outstanding shares at the time of the transaction, which appears to be inconsistent with the number of shares received by the other parties to the transaction as disclosed in the first paragraph on page 7 and the total number of shares outstanding before the transaction as disclosed on page F-5. Please clarify to us this apparent conflict and revise your disclosure as appropriate.
15. Tell us the value assigned to the patent and technology transferred by Mr. Durschlag to the Company and cite the authoritative literature upon which you relied for, and how it supports your accounting treatment.

Note 5: Convertible Notes Payable, page F-14

16. We note your response to comment 29 of our letter dated March 20, 2012. Please revise to adjust your presentation as indicated in your response.
17. We note your response to comment 30 of our letter dated March 20, 2012. Please quantify the impact on the financial statements for each of the periods presented had you amortized the discount to the convertible notes payable over the life of the debt rather than over the five year life of the warrants. Also, provide us your SAB 108 materiality analysis.

Interim Period Ended December 31, 2011

Note 2 . Restatement of the December 31, 2011 Balances

18. Please tell us how you considered the filing requirements of Item 4.02 Form 8-K as it relates to your restatement of your previously issued interim financial statements.

Note 5. Convertible Promissory Notes, page F-30

19. We note your disclosure that the unamortized discount of \$186,739 relating to the notes converted into stock will continue to amortize over the remaining life of the outstanding warrants which were issued in conjunction with these notes. Please tell us the authoritative literature upon which you relied and how it supports this accounting treatment.

Recent Sales of Unregistered Securities, page II-1

20. We note your response to comment 38 of our comment letter dated March 20, 2012. We continue to believe that you should revise your disclosure to make clear that the total consideration of \$3,169,359 received for the senior convertible notes also includes the warrants. Refer to Item 701(c) of Regulation S-K.

Exhibits

21. We note your response to comment 39 of our comment letter dated March 20, 2012. We continue to believe that you should file the senior convertible notes as an exhibit to the registration statement or advise.

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;

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- 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 Jorge Bonilla, Staff Accountant, at (202) 551-3414 or Daniel Gordon, Accounting Branch Chief, at (202) 551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact Folake Ayoola, Attorney Advisor, at (202) 551-3673 or me at (202) 551-3401 with any other questions.

Sincerely,

/s/ Jennifer Gowetski

Jennifer Gowetski
Senior Counsel

cc: Dale S. Bergman, Esq.