



DIVISION OF  
CORPORATION FINANCE

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

April 7, 2014

Via E-mail

Terry Lingren  
Chief Executive Officer  
Resonant Inc.  
460 Ward Drive, Suite D  
Santa Barbara, California 93111

**Re: Resonant Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed March 24, 2014  
File No. 333-193552**

Dear Mr. Lingren:

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.

Business

Our Filter Designs, page 28

1. We note your revisions in response to prior comment 16. Your disclosure indicates that you have a laboratory design for a two-band SAW filter and that you believe that a 3-band tunable filter offers sufficient advantages in terms of cost and size to be a commercially viable product. Please disclose what steps you will have to take to develop a laboratory and commercial design for a 3-band tunable filter.

Single-Band Designs, page 29

2. We note your response to prior comment 9. You continue to disclose that conventional filter designs using SAW technology do not perform well in high frequency bands or in bands with closely spaced receive and transmit channels, typical of many new bands.

Please expand your disclosure to indicate how your intended solutions will address those issues.

Our First Commercial Duplexer Design, page 30

3. Given your disclosure on page 29 that you believe that a 3-band tunable filter offers sufficient advantages to be a commercially viable product, please clarify why you are developing a single-band SAW duplexer with Skyworks. For example, please clarify whether this is a single-band design that has the advantages claimed in the first bullet point under “Our Solutions” on page 26.

Management Discussion And Analysis

Common Stock Valuation, page 39

4. We note your disclosure in the second paragraph on page 39 that independent valuations performed by an unrelated third-party specialist were just one factor used to assist with the valuation of the derivative and warrant liabilities and that you have assumed full responsibility for the estimates. We also note your discussion that you generally utilized the equity value derived in the third-party valuation in determining the price of the common stock used in the valuation models to estimate the fair value of the derivative and warrant liabilities. Please clarify your reliance on the third-party specialist and tell us your consideration of the guidance in Question 141.02 of the Compliance and Disclosure Interpretations on Securities Act Sections, which can be found at <http://www.sec.gov/divisions/corpfin/guidance/sasinterp.htm>.

Capitalization, page 55

5. We note your response to prior comment 25. We understand that cash and cash equivalents is not included in the total capitalization. However, we continue to believe that it should not be presented in the capitalization table since it is not a component of your capitalization. Please revise to remove this from the table on page 55. As an alternative, you could disclose the amount of cash in the narrative below the table.

Consolidated Financial Statements, page F-1

6. Please tell us why you combine the operations of Resonant Inc. and Resonant LLC on the face of your financial statements for the year ended December 31, 2013. In that regard, please tell us why you do not present separate audited periods, similar to the disclosure in Note 10. Please tell us the guidance that you relied up on in determining that your current presentation is appropriate.

Note 3. Patents and Domain Name, page F-12

7. Please clarify in your disclosure how you valued the contribution of patents from STI in the exchange transaction. We note that STI is a related party.

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 comment, 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.

Terry Lingren  
Resonant Inc.  
April 7, 2014  
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You may contact Kristin Lochhead at (202) 551-3664 or Brian Cascio at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz  
Assistant Director

cc (via e-mail): John J. McIlvery, Esq. — Stubbs Alderton & Markiles, LLP