



DIVISION OF
CORPORATION FINANCE

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

February 20, 2014

Via E-mail

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

**Re: Resonant Inc.
Registration Statement on Form S-1
Filed January 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.

Prospectus Cover Page

1. Since you are an emerging growth company, please state your election under Section 107(b) of the JOBS Act:
 - If you have elected to opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b), include a statement that the election is irrevocable; or
 - If you have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1), provide a risk factor explaining that this election allows you to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. Please state in your risk factor that, as a result of this election, your financial statements may not be

comparable to companies that comply with public company effective dates. Include a similar statement in your critical accounting policy disclosures.

2. Since you are an emerging growth company, please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.
3. We note your disclosure that you will issue warrants to the underwriter. Please tell us how you will know the number of shares underlying the warrants if the over-allotment has not yet been exercised at the time of the closing. Also, tell us the reason for tying the underwriter's compensation to the exercise of the over-allotment option.

Prospectus Summary

4. If you have not yet built a prototype or other working version of your design, please highlight this fact in the summary.

Our Business Model, page 2

5. Please refrain from including in your disclosure names of well-known companies with whom you do not yet have a contractual relationship.

Risks Related to Our Business, page 3

6. The last bullet in this section indicates that your "revenues may decrease." Please revise to clarify that to date you have not generated any revenues.

Market and Industry Data, page 23

7. Please provide us with support for the market opportunity data and industry statistics that you have included throughout your prospectus. Clearly mark the relevant sections that support the data and statistics, and note the applicable page number in the registration statement where the disclosure is located. Please also tell us:
 - how you confirmed that the information reflects the most recent available information;
 - whether all of the information is publicly available;
 - whether you paid for the compilation of any of the data;

- whether any market information was prepared for your use in the registration statement or by an affiliated party; and
- whether the authors of the industry information consented to your use of such data in the registration statement.

Your disclosure should clearly identify the disclosure which is attributable to each source, since conclusions based upon your own research should be identified as management's belief.

Business

Our History, page 24

8. Please tell us where you have filed the agreement pursuant to which Superconductor Technologies Inc. assigned the patent portfolio related to your intended solutions to you or Resonant LLC.

Challenges Faced by the Mobile Device Industry, page 25

9. You indicate that conventional filter designs using SAW technology do not perform adequately 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 Solutions, page 26

10. Please clarify what you mean by "reconfigurable" in the second bullet point. For example, do you mean your filters would be tunable or do you mean that your designs would contain multiple filters that could be switched on or off depending on the combination of bands used by the various carriers.

Our Technology, page 26

11. Please clarify whether "Infinite Synthesized Networks" is term recognized in your industry or if this is a term you use to refer to your technology.
12. You indicate that your technology allows many variables to be changed and components to be adjusted. To the extent it would assist investors in better understanding your technology and proposed solutions, please disclose what variables and components could be changed, and how this is a benefit of your design over competing technologies.

RF Front-Ends, page 27

13. You disclose that there are four primary components of the RF front-end. Please disclose which of those components your solutions intend to address. If you do not address all four primary components, please disclose how that affects the market projections you included in the last paragraph of this section.

Our Filter Designs, page 28

14. Please revise Figure 3 to clarify what you are indicating by the white boxes in the figure.
15. Please expand your disclosure to indicate how your designs are different from and superior to the ladder filter design.
16. The last paragraph in this section indicates that you have designed a SAW filter that is reconfigurable between two alternate bands. Please disclose if you will have to design filters that are tunable for more than two bands or that will address all of the various bands that carriers use in order for your solutions to be viable commercial products.

Future Designs, page 28

17. Please clarify the meaning of the term “cognitive radio.”

Our First Commercial Duplexer Design, page 30

18. Please clarify which of your solutions, SAW duplexers or reconfigurable filters, are incorporated into the duplexer described in this section.

Intellectual Property, page 31

19. Please clarify how many issued patents you have and how many patent applications you have pending. Please also clarify how many of those patents and patent applications relate to technological claims underlying the solutions you disclose in the bullet points under “Our Solutions” on page 26.

Competition, page 31

20. Please expand your disclosure to indicate the meaning of the terms “large dynamic range” and “orders of magnitude” in the third paragraph of this section. Please tell us the basis for your belief that it will take “several decades” for digital solutions to replace analog solutions.
21. Please expand your disclosure in an appropriate section to indicate how your current solutions avoid the limitations described in the last paragraph of this section.

Employees, page 32

22. Please clarify whether your current employees include the inventors of the patents and patent applications related to your intended solutions. If the inventors of the patents and patent applications did not join your company please include appropriate risk factor disclosure.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Financial Instruments and Fair Value, page 37

23. Please revise to include a discussion of the critical judgments and assumptions included in the valuation of derivative instruments and warrant liabilities. In particular, please discuss the significant factors, assumptions and methodologies used in determining fair value of your common stock during the twelve months prior to the date of the most recent balance sheet. Disclose the valuation method used and the reasons why you chose that method.

Use of Proceeds, page 52

24. Please provide the disclosures called for by Instruction 4 to Regulation S-K Item 504.

Capitalization, page 53

25. Please revise to remove the caption "cash and cash equivalents" from the table on page 53 since this is not part of your capitalization.
26. Please provide us the adjustments used to determine the pro forma amounts in the Capitalization table on page 58. The adjustments made should also be clearly discussed in the footnote to the table.
27. We note the disclosure that you intend to issue common stock options and restricted stock units on the effective date of the registration statement. Please tell us how you plan to value the underlying common stock of those issuances.

Description of Capital Stock, page 62

28. We note Article XI of your Amended and Restated Bylaws entitled "Forum for Adjudication of Dispute." Several lawsuits are currently challenging the validity of choice of forum provisions in certificates of incorporation. Please disclose that although you have included a choice of forum clause in your restated certification of incorporation, it is possible that a court could rule that such provision is inapplicable or unenforceable.

Anti-Takeover Effects of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, page 64

29. Please briefly describe the anti-takeover effects of the super-majority voting provision contained in Article IX of your Amended and Restated Certificate of Incorporation.

Consolidated Financial Statements

30. Throughout the filing, please revise to clearly designate the financial statements of the predecessor company (Resonant LLC) from that of the successor (Resonant Inc.).

Report of Independent Registered Public Accounting Firm, pages F-2

31. We see that the report of independent registered public accounting firm refers to the financial statements of Resonant Inc. as of December 31, 2012 and for the period from May 29, 2012 (inception) to December 31, 2012. However, the audited financial statements included in the filing appear to be those of Resonant LLC as predecessor to Resonant Inc. Please have your auditors revise the report to refer to the appropriate entity or explain to us why the current presentation is correct.
32. We note that your report of independent registered public accounting firm is signed by the firm of Squar, Milner, Peterson, Miranda & Williamson, LLP. While we see that the firm Squar, Milner, Peterson, Miranda & Williamson, Certified Public Accountants, LLP of Newport Beach, CA is registered with the PCAOB, we did not note a registration for the firm that signed your audit reports. Please amend to provide audit reports from a firm registered with the PCAOB. See Section 102 of the Sarbanes-Oxley Act of 2002.

Consolidated Balance Sheets, page F-3

33. Please revise to separately identify outstanding debt that is convertible.

Note 1. Organization and Description of Business, page F-7

34. Please revise to include a discussion of the presentation of the predecessor and successor financial statements.

Note 4. Exchange Transaction, page F-12

35. We see that you accounted for the exchange of Class C member's units for subordinated note as a treasury stock transaction. Please tell us how you applied FASB ASC 505-30-30-3 in determining that the entire amount of the excess of the subordinated note over the par value of the Class C units would be recorded as Accumulated deficit.

Note 5. Bridge Loans, Member Loan and Convertible Debt, Senior Convertible Note. Page F-13

36. Please revise to disclose how you determined the equity value of \$10.5 million as an input to the Monte-Carlo option-pricing model for the valuation of the derivative liability related to the senior convertible note.

Note 6. Warrant Liabilities, page F-15

37. Please revise to disclose *how* you determined the inputs to the Black Scholes and Monte-Carlo valuation models for each of the warrants discussed on pages F-15 and F-16 for each period presented. For example, since your stock is not traded, please explain how you determined the fair value of your stock as the implied unit price and /or equity value. We note the related disclosures in Note 9.
38. Once an IPO price is provided, please tell us each significant factor contributing to the difference between the fair value of your common stock used to value warrants and derivative liabilities during the twelve months prior to the date of the most recent balance sheet and the estimated IPO price.

Item 15. Recent Sales of Unregistered Securities, page II-2

39. Please provide the information required by Regulation S-K Item 701(d).

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.

Terry Lingren
Resonant Inc.
February 20, 2014
Page 8

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 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