

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended **June 30, 2017**

or

Transition Report Pursuant Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____ .

Commission file number **001-36467**

RESONANT INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

45-4320930
(I.R.S. Employer
Identification No.)

110 Castilian Drive, Suite 100
Goleta, California 93117
(Address of principal executive offices, zip code)

(805) 308-9803

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
	(Do not check if smaller reporting company)	Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of August 8, 2017, the issuer had 14,698,827 shares of common stock issued and outstanding.

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PART I: FINANCIAL INFORMATION**Item 1. Financial Statements**

RESONANT INC.
Condensed Consolidated Balance Sheets
(Unaudited)

	<u>December 31, 2016</u>	<u>June 30, 2017</u>
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 5,084,000	\$ 9,088,000
Accounts receivable	56,000	162,000
Prepaid expenses and other current assets	160,000	206,000
Investments held-to-maturity	4,747,000	—
TOTAL CURRENT ASSETS	10,047,000	9,456,000
PROPERTY AND EQUIPMENT		
Property and equipment	2,269,000	2,480,000
Less: Accumulated depreciation and amortization	(1,275,000)	(1,597,000)
PROPERTY AND EQUIPMENT, NET	994,000	883,000
NONCURRENT ASSETS		
Intangible assets, net	1,253,000	1,300,000
Restricted cash	100,000	100,000
Goodwill	789,000	840,000
Deferred tax asset	—	10,000
Other assets	16,000	19,000
TOTAL OTHER NONCURRENT ASSETS	2,158,000	2,269,000
TOTAL ASSETS	\$ 13,199,000	\$ 12,608,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 905,000	\$ 403,000
Accrued expenses	35,000	106,000
Accrued salaries and payroll related expenses	1,765,000	1,323,000
Deferred revenue, current	279,000	245,000
Deferred rent, current	20,000	3,000
TOTAL CURRENT LIABILITIES	3,004,000	2,080,000
LONG-TERM LIABILITIES		
Deferred revenue	46,000	—
Deferred rent	—	5,000
Deferred income taxes	16,000	—
TOTAL LIABILITIES	3,066,000	2,085,000
Commitments and contingencies (Note 8)		
STOCKHOLDERS' EQUITY		
Common stock, \$0.001 par value, 47,000,000 authorized and 12,468,647 outstanding as of December 31, 2016, and 14,620,873 outstanding as of June 30, 2017	12,000	14,000
Preferred stock, \$0.001 par value, 3,000,000 authorized and none outstanding as of December 31, 2016 and June 30, 2017	—	—
Additional paid-in capital	56,331,000	65,813,000
Accumulated other comprehensive income (loss)	(51,000)	12,000
Accumulated deficit	(46,159,000)	(55,316,000)
TOTAL STOCKHOLDERS' EQUITY	10,133,000	10,523,000
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 13,199,000	\$ 12,608,000

See Accompanying Notes to Condensed Consolidated Financial Statements

RESONANT INC.
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2017	2016	2017
REVENUES	\$ 63,000	\$ 220,000	\$ 90,000	\$ 376,000
OPERATING EXPENSES				
Research and development	1,327,000	2,245,000	2,519,000	4,355,000
General and administrative	1,570,000	2,058,000	3,339,000	4,844,000
Depreciation and amortization	156,000	194,000	301,000	382,000
TOTAL OPERATING EXPENSES	3,053,000	4,497,000	6,159,000	9,581,000
NET OPERATING LOSS	(2,990,000)	(4,277,000)	(6,069,000)	(9,205,000)
OTHER INCOME, NET				
Interest and investment income	2,000	16,000	6,000	25,000
Other expense	—	(1,000)	—	(1,000)
TOTAL OTHER INCOME, NET	2,000	15,000	6,000	24,000
LOSS BEFORE INCOME TAXES	(2,988,000)	(4,262,000)	(6,063,000)	(9,181,000)
Provision for (benefit from) income taxes	—	1,000	1,000	(24,000)
NET LOSS	\$ (2,988,000)	\$ (4,263,000)	\$ (6,064,000)	\$ (9,157,000)
Foreign currency translation adjustment, net of tax	—	45,000	—	63,000
COMPREHENSIVE LOSS	\$ (2,988,000)	\$ (4,218,000)	\$ (6,064,000)	\$ (9,094,000)
NET LOSS PER SHARE - BASIC AND DILUTED	\$ (0.34)	\$ (0.29)	\$ (0.75)	\$ (0.66)
Weighted average shares outstanding — basic and diluted	8,870,245	14,535,451	8,103,908	13,967,476

See Accompanying Notes to Condensed Consolidated Financial Statements

RESONANT INC.
Condensed Consolidated Statements of Stockholders' Equity
For The Six Months Ended June 30, 2017
(Unaudited)

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amount</u>				
Balance, December 31, 2016	12,468,647	\$ 12,000	\$ 56,331,000	\$ (46,159,000)	\$ (51,000)	\$ 10,133,000
Issuance of common stock for compensation	452,200	—	—	—	—	—
Stock-based compensation	—	—	1,962,000	—	—	1,962,000
Sales of common stock, net of offering costs	1,626,898	2,000	7,466,000	—	—	7,468,000
Exercise of warrants, cashless	45,310	—	—	—	—	—
Exercise of stock options	27,818	—	54,000	—	—	54,000
Net loss	—	—	—	(9,157,000)	—	(9,157,000)
Foreign currency translation adjustments, net of tax	—	—	—	—	63,000	63,000
Balance, June 30, 2017	14,620,873	\$ 14,000	\$ 65,813,000	\$ (55,316,000)	\$ 12,000	\$ 10,523,000

See Accompanying Notes to Condensed Consolidated Financial Statements

RESONANT INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six months ended June 30,	
	2016	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Net Loss	\$ (6,064,000)	\$ (9,157,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	301,000	382,000
Deferred tax benefit	—	(24,000)
Stock-based compensation	798,000	1,358,000
Non-cash investment income	(1,000)	—
Non-cash patent write-off	14,000	—
Changes in assets and liabilities:		
Accounts receivable	—	(106,000)
Prepays and other current assets	95,000	(39,000)
Other assets	—	(3,000)
Accounts payable	182,000	(248,000)
Accrued expenses	50,000	70,000
Accrued salaries and payroll related expenses	36,000	160,000
Deferred revenue	—	(84,000)
Deferred rent	(17,000)	(12,000)
Net cash used in operating activities	(4,606,000)	(7,703,000)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of property and equipment	(236,000)	(369,000)
Expenditures for patents and domain names	(105,000)	(193,000)
Redemption of investments held-to-maturity	3,006,000	4,747,000
Purchase of investments held-to-maturity	(4,249,000)	—
Net cash provided by (used in) investing activities	(1,584,000)	4,185,000
CASH FLOWS FROM FINANCING ACTIVITIES		
Net proceeds from the sale of common stock from private placement offering	5,177,000	7,468,000
Proceeds from the exercise of stock options	—	54,000
Net cash provided by financing activities	5,177,000	7,522,000
Effects of currency translation on cash	—	—
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(1,013,000)	4,004,000
CASH AND CASH EQUIVALENTS — Beginning of period	2,501,000	5,084,000
CASH AND CASH EQUIVALENTS — End of period	\$ 1,488,000	\$ 9,088,000
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Taxes Paid	\$ 1,000	\$ 1,000
SUPPLEMENTAL DISCLOSURE OF NON-CASH ACTIVITIES		
Issuance of common stock in settlement of liability	\$ 110,000	\$ 272,000
Stock options issued in settlement of liability	\$ —	\$ 332,000
Property and equipment included in accounts payable	\$ —	\$ 30,000
Patents included in accounts payable	\$ —	\$ 23,000

See Accompanying Notes to Condensed Consolidated Financial Statements

RESONANT INC.
Notes to Condensed Consolidated Financial Statements

NOTE 1—ORGANIZATION AND DESCRIPTION OF BUSINESS

Overview

Resonant Inc. is a late-stage development company located in Goleta, California. We were incorporated in Delaware in January 2012 as a wholly owned subsidiary of Superconductor Technologies Inc., or STI, but had not conducted any operations through June 16, 2013. Resonant LLC, a limited liability company, was formed in California in May 2012. We commenced business on July 6, 2012 with initial contributions from our founders and STI. We changed our form of ownership from a limited liability company to a corporation in an exchange transaction in June 2013. We are the successor of Resonant LLC. We completed our initial public offering, or IPO, on May 29, 2014. We acquired all of the issued and outstanding capital stock of GVR Trade S.A, or GVR, on July 6, 2016. GVR is a wholly owned subsidiary of Resonant Inc.

We are creating an innovative software, intellectual property, or IP, and services platform that we believe has the ability to increase designer efficiency, reduce the time to market and lower unit costs in the design of filters for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end, or RFFE, is the circuitry in a mobile device responsible for analog signal processing and is located between the device's antenna and its digital baseband. The platform we are developing is based on fundamentally new technology that we call Infinite Synthesized Networks®, or ISN®, to configure and connect resonators, the building blocks of RF filters. Filters are a critical component of the RF front-end used to select desired radio frequency signals and reject unwanted signals. Our ISN® platform allows us to develop unique, custom designs that address the increasing complexity of the RFFE due to carrier aggregation, or CA, by both reducing the size of the filter and improving performance. Our goal is to utilize our ISN® platform to support our customers in reducing their time to develop complex filter designs, to access new classes of filter designs, and to do it more cost effectively.

We are validating and commercializing our technology through the creation of filter designs that address the problems in the high growth RFFE industry created by the growing number of frequency bands in mobile devices. We are developing a series of single-band surface acoustic wave, or SAW, filter designs for frequency bands presently dominated by larger and more expensive bulk acoustic wave, or BAW, filters. We are also developing multiplexer filter designs for two or more bands to address the CA requirements of our customers. Finally, we are developing unique filter designs, enabled by ISN®, to replace multiple filters and associated componentry for many bands, with higher performance. Our design development agreements with our customers generally include up-front payments to assist in covering a portion of the development costs of the designs, as well as additional milestone payments upon completion of the design.

We believe licensing our solutions is the most direct and effective means of delivering our solutions to the market. Our target customers make part or all of the RF front-end. We intend to retain ownership of our solutions, and we expect to be compensated through license fees and royalties based on sales of RF front-end filters that incorporate our solutions. We currently do not intend to manufacture or sell any physical products. In addition, we are exploring the possibility of licensing portions of our ISN® suite to designers and manufacturers of RF products in the mobile industry.

Capital Resources and Liquidity

We are using the net proceeds from the sales of our common stock for product development to commercialize our technology, research and development, the development of our patent strategy and expansion of our patent portfolio, as well as for working capital and other general corporate purposes. Our costs include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities including travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with a late-stage development, publicly-traded technology company. However, this is highly dependent on the nature of our development efforts and our success in commercialization. We continue to add employees for research and development, as well as general and administrative functions, to support our efforts. Additionally, we continue to incur consulting expenses related to technology development and other efforts as well as legal and related expenses to protect our intellectual property.

The amounts that we actually spend for any specific purpose may vary significantly and will depend on a number of factors including, but not limited to, our expected cash resources, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, research and development, market conditions, and changes in or revisions to our marketing strategies. In addition, we may invest in complementary products, technologies or businesses.

We have earned minimal revenues since inception, and our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt. At December 31, 2016 and June 30, 2017, we had incurred accumulated losses of \$46.2 million and \$55.3 million, respectively. The losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up, financing and public company costs. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

Our condensed consolidated financial statements account for the continuation of our business as a going concern. We are subject to the risks and uncertainties associated with a new business. Our principal source of liquidity as of June 30, 2017 consists of existing cash and cash equivalents of \$9.1 million, which includes \$7.5 million we raised in February 2017 in a private placement of common stock and warrants. In the first half of 2017, we used approximately \$8.2 million in cash and investments. Due to these conditions, substantial doubt exists as to our ability to continue as a going concern. After evaluation of these conditions, we believe our current resources will provide sufficient funding for planned operations into 2018. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to existing investors or others, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty.

We have a Form S-3 universal shelf registration statement on file with the SEC. The universal shelf registration statement on Form S-3 permits us to sell, in one or more public offerings, shares of our common stock, shares of preferred stock or debt securities, or any combination of such securities and warrants to purchase securities, for proceeds in an aggregate amount of up to \$35.0 million, subject to limitations on the amount of securities we may sell in any twelve month period. As of June 30, 2017, we have raised a total of \$11.5 million of gross proceeds from the sale of 2,715,000 shares of our common stock, leaving approximately \$23.5 million of securities available for the issuance pursuant to the Form S-3. The Form S-3 will expire in May 2019.

The accompanying condensed consolidated financial statements at June 30, 2017 and for the three and six months ended June 30, 2016 and 2017 are unaudited, but include all adjustments, consisting of normal recurring entries, that management believes to be necessary for a fair presentation of the periods presented. Prior period figures have been reclassified, wherever necessary, to conform to current presentation. Interim results are not necessarily indicative of results for a full year. Balance sheet amounts as of December 31, 2016 have been derived from our audited consolidated financial statements as of that date.

The condensed consolidated financial statements included herein have been prepared by us pursuant to the rules and regulations of the SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. The financial statements should be read in conjunction with our audited consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2016. Our operating results will fluctuate for the foreseeable future. Therefore, period-to-period comparisons should not be relied upon as predictive of the results in future periods.

NOTE 2—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Use of Estimates—The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. In the opinion of management, all adjustments (consisting of normal accruals) considered for a fair presentation have been included. Significant estimates made in preparing these financial statements include (a) assumptions to calculate the fair values of financial instruments, warrants and equity instruments and other liabilities and the deferred tax asset valuation allowance and (b) the useful lives for depreciable and amortizable assets. Actual results could differ from those estimates. In the opinion of management, all adjustments, including normal recurring accruals considered necessary for a fair presentation, have been included.

Consolidation —The accompanying financial statements include the accounts of the Company and its wholly-owned subsidiary, GVR Trade, S.A. All significant intercompany balances and transactions have been eliminated.

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Cash and Cash Equivalents—We consider all liquid instruments purchased with a maturity of three months or less to be cash equivalents.

Concentration of Credit Risk—We maintain checking accounts at one U.S. financial institution. The U.S. bank accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to \$250,000 per account owner. GVR Trade S.A., our wholly owned Swiss-based subsidiary maintains checking accounts at one major national financial institution. Management believes we are not exposed to significant credit risk due to the financial position of the depository institutions in which our deposits are held.

Restricted Cash—Restricted cash at December 31, 2016 and June 30, 2017 represents cash held within a certificate of deposit with a financial institution, which serves as collateral for our corporate credit cards. The restriction on the cash will lapse in conjunction with the expiration of the use of the corporate credit cards.

Investments—Securities held-to-maturity: Management determines the appropriate classification of investments at the time of purchase and reevaluates such designation as of each balance sheet date. Investment securities are classified as held-to-maturity when we have the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost, adjusted for amortization of premiums and accretion of discounts to maturity computed under the effective interest method. Such amortization is included in investment income. Interest on securities classified as held-to-maturity is included in investment income.

When the fair value of an investment instrument classified as held-to-maturity is less than its amortized cost, management assesses whether or not: (i) we have the intent to sell the instrument or (ii) it is more likely than not that we will be required to sell the instrument before its anticipated recovery. If either of these conditions is met, we must recognize an other-than-temporary impairment for the difference between the instruments' amortized cost basis and its fair value, and include such amounts in net securities gains (losses).

For investment instruments that do not meet the above criteria and are not expected to be recovered at the amortized cost basis, the instrument is considered other-than-temporarily impaired. For these instruments, we separate the total impairment into the credit loss component and the amount of the loss related to other factors. In order to determine the amount of the credit loss, we calculate the recovery value by performing a discounted cash flow analysis based on the current cash flows and future cash flows management expects to recover. The discount rate is the effective interest rate implicit in the underlying instrument. The amount of the total other-than-temporary impairment related to credit loss is recognized in earnings and is included in net securities gains (losses). The amount of the total other-than-temporary impairment related to other factors is recognized in other comprehensive income. For investment instruments that have other-than-temporary impairment recognized through earnings, if through subsequent evaluation there is a significant increase in the cash flow expected, the difference between the amortized cost basis and the cash flows expected to be collected is accreted as interest income.

During 2017, we invested in commercial papers and certificates of deposit that were classified as held-to-maturity. As of June 30, 2017, all of our investments have matured and we have no investments classified as held-to-maturity. We recorded investment income of \$2,000 and \$16,000 for the three months ended June 30, 2016 and 2017, respectively, and \$6,000 and \$25,000 for the six months ended June 30, 2016 and 2017, respectively, associated with investments.

Fair Value of Financial Instruments—We measure certain financial assets and liabilities at fair value based on the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The carrying amounts of our financial instruments, including cash equivalents, restricted cash, investments held-to-maturity, accounts payable, and accrued liabilities, approximate fair value due to their short maturities.

Accounts Receivable—Trade accounts receivable are stated net of allowances for doubtful accounts. Management estimates the allowance for doubtful accounts based on review and analysis of specific customer balances that may not be collectible, customer payment history and any other customer-specific information that may impact ability to collect the receivable. Accounts are considered for write-off when they become past due and when it is determined that the probability of collection is remote. There was no allowance for doubtful accounts at December 31, 2016 and June 30, 2017.

Property and Equipment—Property and equipment consists of leasehold improvements associated with our offices, software purchased during the normal course of business, equipment and office furniture and fixtures, all of which are recorded at cost. In July 2016, other property and equipment were acquired as part of the purchase of GVR and were initially recorded at their fair value. Depreciation and amortization is recorded using the straight-line method over the respective useful lives of the assets ranging from three to five years. Leasehold improvements are amortized over the shorter of lease term or useful life.

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Long-lived assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Intangible Assets, net—Intangible assets are recorded at cost and amortized over the useful life. In the case of business combinations, intangible assets are recorded at fair value. At December 31, 2016 and June 30, 2017, intangible assets, net, includes patents and a domain name and other intangible assets purchased as part of our acquisition of GVR, including customer relationships, technology and a trademark. Intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Goodwill—At June 30, 2017, goodwill represents the difference between the price paid to acquire GVR and the fair value of the assets acquired, net of assumed liabilities. We review goodwill for impairment annually and whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Revenue Recognition—Revenue consists primarily of fees received in connection with filter design projects with customers. Contracts may involve upfront non-refundable fees, intended to support our initial engineering product development efforts, as well as milestone payments based upon the successful completion of certain deliverables. In relation to the upfront non-refundable fees, we recognize revenue in accordance with the Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 605, *Revenue Recognition*. We recognize revenue as the services are performed over the initial engineering filter design development period and when all of the following criteria have been met: persuasive evidence of an arrangement exists, services have been rendered, collection of the revenue is reasonably assured, and the fees are fixed or determinable. We record the expenses related to these projects in the periods incurred and they are generally included in research and development expense.

In addition to upfront non-refundable payments, the filter design projects may include certain milestone payments upon successful filter design or a design stage completion. These filter design projects are associated with complex technology development, and as such we do not have certainty about our ability to achieve the program milestones. Achievement of the milestone is generally dependent on the filter design specifications and the milestone typically needs to be accepted by the customer. The payment associated with achieving the milestone is generally commensurate with our effort or the value of the deliverable and is generally non-refundable. We record revenue associated with the milestone payments in accordance with ASC Topic 605-28 *Milestone Method* whereby we record revenue upon successful completion of the related milestone and when collection of the revenue is reasonably assured.

During the three and six months ended June 30, 2017, we recorded revenue of \$220,000 and \$376,000, respectively, primarily related to the development of filter designs. As of June 30, 2017, we have recorded \$245,000 in deferred revenue, primarily related to our filter design development projects.

Research and Development—Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with ASC Topic 730-10, *Research and Development*.

Operating Leases—We lease office space and research facilities under operating leases. Certain lease agreements contain free or escalating rent payment provisions. We recognize rent expense under such leases on a straight-line basis over the term of the lease. Lease renewal periods are considered on a lease-by-lease basis in determining the lease term.

Stock-Based Compensation—We account for employee stock options in accordance with ASC Topic 718, *Compensation-Stock Compensation*. For stock options issued to employees and directors we use the Black-Scholes option valuation model for estimating fair value at the date of grant. For stock options issued for services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC Topic 505-50, *Equity*, or ASC 505-50, as amended. Non-employee option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the common stock options or warrants are fully vested.

We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. Compensation expense is recognized for the portion of the award that is ultimately expected to vest over the period during which the recipient renders the required services to the Company generally using the straight-line single option method. The fair value of non-employee restricted stock units awarded are remeasured as the awards

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vest, and the resulting increase or decrease in fair value, if any, is recognized as an increase or decrease to compensation expense in the period the related services are rendered.

In the case of award modifications, we account for the modification by recognizing the effect of the modification in the period the award was modified.

Stock-based compensation expense is included in research and development expenses and general and administrative expenses.

Earnings Per Share, or EPS—EPS is computed in accordance with ASC Topic 260, *Earnings per Share*, and is calculated using the weighted average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents unless the effect is to reduce a loss or increase the income per share. Potential common shares consist of the incremental common shares issuable upon the exercise of stock options (using the treasury stock method), the exercise of warrants (using the if-converted method) and the vesting of restricted stock unit awards.

The following table presents the number of shares excluded from the calculation of diluted net loss per share attributable to common stockholders for the periods below:

	Six Months Ended June 30,	
	2016	2017
Common stock warrants	2,881,409	4,491,568
Common stock options	743,425	822,305
Non-vested restricted stock unit awards	658,477	1,404,392
Total shares excluded from net loss per share attributable to common stockholders	4,283,311	6,718,265

Income Taxes—We account for income taxes in accordance with ASC Topic 740, *Income Taxes*, or ASC 740, which requires the recognition of deferred tax assets and liabilities for the future consequences of events that have been recognized in our condensed consolidated financial statements or tax returns. The measurement of the deferred items is based on enacted tax laws. In the event the future consequences of differences between financial reporting bases and the tax bases of our assets and liabilities result in a deferred tax asset, ASC 740 requires an evaluation of the probability of being able to realize the future benefits indicated by such asset. A valuation allowance related to a deferred tax asset is recorded when it is more likely than not that some portion or the entire deferred tax asset will not be realized. As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax expense in each of the jurisdictions in which we operate. We also assess temporary differences resulting from differing treatment of items for tax and accounting differences. We record a valuation allowance to reduce the deferred tax assets to the amount of future tax benefit that is more likely than not to be realized. For the period when we were organized as a limited liability company, we were treated as a partnership for federal and state income tax purposes under the entity classification domestic default rules. As of December 31, 2016 and June 30, 2017, no liability for unrecognized tax benefits was required to be reported. We recognize interest and penalties related to income tax matters in income taxes, and there were none for the three and six months ended June 30, 2016 and June 30, 2017, respectively.

We have filed, or are in the process of filing, tax returns that are subject to audit by the respective tax authorities. Although the ultimate outcome would be unknown, we believe that any adjustments that may result from tax return audits are not likely to have a material, adverse effect on our condensed consolidated results of operations, financial position or cash flows.

Reclassifications—Certain amounts in the condensed consolidated statement of operations for the three and six months ended June 30, 2016 have been reclassified to conform to the current year presentation.

Business Combinations—We record business combinations using the acquisition method of accounting and, accordingly, allocate the fair value of purchase consideration to the assets acquired and liabilities assumed based on their fair values at the acquisition date. The excess of the fair value of the purchase consideration over the fair value of the assets acquired and liabilities assumed is recorded as goodwill. The results of operations of the business acquired are included in our consolidated results of operations beginning on the date of acquisition.

Foreign Currency Translation—The Swiss Franc has been determined to be the functional currency for the net assets of our Swiss-based subsidiary. We translate the assets and liabilities to U.S. dollars at each reporting period using exchange rates in effect at the balance sheet date and record the effects of the foreign currency translation in accumulated other

comprehensive income (loss) in shareholders' equity. We translate the income and expenses to U.S. dollars at each reporting period using the average exchange rate in effect for the period and record the effects of the foreign currency translation as other comprehensive income (loss) in the consolidated statements of comprehensive loss. Gains and losses resulting from foreign currency transactions are included in net loss in the consolidated statements of comprehensive loss.

Recent Accounting Pronouncements

Revenue from Contracts with Customers—In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The new revenue recognition standard provides a five-step analysis of transactions to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which defers the effective date of ASU No. 2014-09 for all entities by one year to annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. This ASU shall be applied either retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. Early adoption is permitted but not before the annual periods beginning after December 15, 2016, including interim periods within that reporting period. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606), Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*. This ASU provides further guidance surrounding the recognition of revenue as well as guidance involving principal versus agent considerations. The effective date of this ASU is the same as ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606), Identifying Performance Obligations and Licensing*. This amendment provides clarification surrounding the identification of performance obligations and offers licensing implementation guidance. The effective date of this ASU is the same as ASU 2014-09. In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606), Narrow-Scope Improvements and Practical Expedients*, which provides further guidance surrounding certain aspects of ASU 2014-09. The effective date of this ASU is the same as ASU 2014-09. The new standards will become effective for us on January 1, 2018 and we plan to adopt at that time. We have reviewed our contracts which we believe will be impacted by the adoption and we currently anticipate adopting the standard using the modified retrospective approach with a cumulative effect of the initial application recognized at the date of adoption. We do not believe the adoption of this guidance will have a significant impact on our balance sheet or statements of comprehensive loss due to the relatively small number of contracts and nature of our contracts, which are primarily related to design development projects where we believe the revenue will be recognized over time, which is consistent with the current method of revenue recognition.

Leases—In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, a comprehensive new leases standard that amends various aspects of existing accounting guidance for leases. It will require recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The main difference between previous U.S. GAAP and the amended standard is the recognition of lease assets and lease liabilities by lessees on the balance sheet for those leases classified as operating leases under previous U.S. GAAP. The accounting applied by a lessor is largely unchanged from that applied under previous U.S. GAAP. As a result, we will have to recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing our right to use the underlying asset for the lease term on the balance sheet. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the effects of the new guidance on our consolidated financial statements and disclosures but we do not expect it to have a material impact on our consolidated financial statements.

Intangibles-Goodwill and Other—In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which simplifies the accounting for goodwill impairments by eliminating step 2 from the goodwill impairment test. The amended guidance will become effective for us commencing in the first quarter of fiscal 2019. We are currently evaluating the impact of this new standard.

Compensation-Stock Compensation—In May 2017, the FASB issued ASU No. 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*, which provides clarity over the accounting for a change to the terms or conditions of a share-based payment award. The amendments in the update are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted. The amendments in this update should be applied prospectively to an award modification on or after the adoption date. We plan to early adopt this guidance if, and when, we experience a share-based award modification.

NOTE 3—ACQUISITION OF GVR TRADE S.A.

On July 6, 2016, we acquired all of the issued and outstanding capital stock of GVR Trade S.A. The purchase price, consisting of \$661,000 in cash and 125,000 shares of our common stock with a fair value of \$545,000, based on a per share price of \$4.36 as of the date of acquisition, was approximately \$1.2 million. At the time of acquisition, we incurred approximately \$92,000 of acquisition related expenses. GVR is a wholly owned direct subsidiary of Resonant.

As of the acquisition date we recorded goodwill of approximately \$824,000 which represented the excess of the purchase price over the fair value of the assets acquired. The fair value for the assets acquired and liabilities assumed were based upon independent calculations and valuations. We review goodwill for impairment annually and whenever events or circumstances indicate that the carrying amount of the assets may not be recoverable.

The acquisition was not material to our condensed consolidated financial statements and we have included the financial results of the acquired business in our condensed consolidated financial statements from the date of acquisition. Pro forma historical results of operations of this business acquisition during the three and six months ended June 30, 2016 have not been presented as it is not material to our condensed consolidated statements of comprehensive loss.

NOTE 4—WARRANTS

From time to time, we have issued warrants to purchase shares of common stock. These warrants have been issued in connection with the financing transactions and consulting services. Our warrants are subject to standard anti-dilution provisions applicable to shares of our common stock.

Private Placement Warrants

In February 2017, we issued warrants to purchase 1,626,898 shares of our common stock at an exercise price of \$8.25 in connection with our private placement sale of 1,626,898 shares of common stock. The warrants are exercisable for a period commencing 6 months and ending 30 months after the closing of the financing. We refer to these warrants as Private Placement Warrants - 2017. We estimated the fair value of the Private Placement Warrants at \$2,084,000 using the Black-Scholes option valuation model with the following assumptions: market prices of the stock of \$4.91 per share, time to maturity of 3 years, volatility of 60%, zero expected dividend rate and risk free rate of 1.50%. The allocation of the fair value of these warrants was included in additional paid-in capital on the consolidated balance sheet.

A roll-forward of warrant share activity from January 1, 2016 to June 30, 2016 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2016	Warrants Issued	Warrants Exercised/ Expired	Issued and Outstanding Warrants as of June 30, 2016
Bridge Warrants	249,999	—	—	249,999
Consulting Warrants	117,778	—	(19,778) (1)	98,000
Financing Warrants	78,186	—	—	78,186
Underwriting Warrants	310,500	—	—	310,500
IR Consulting Warrants	48,000	—	—	48,000
Private Placement Warrants	—	2,096,724	—	2,096,724
	<u>804,463</u>	<u>2,096,724</u>	<u>(19,778)</u>	<u>2,881,409</u>

(1) During the six months ended June 30, 2016 there were 19,778 common stock warrants that were exercised through a cashless exercise which resulted in 19,693 shares being issued.

A roll-forward of warrant share activity from January 1, 2017 to June 30, 2017 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2017	Warrants Issued	Warrants Exercised/ Expired	Issued and Outstanding Warrants as of June 30, 2017
Bridge Warrants	249,999	—	—	249,999
Consulting Warrants	98,000	—	(41,889) (1)	56,111
Financing Warrants	78,186	—	—	78,186
Underwriting Warrants	310,500	—	—	310,500
IR Consulting Warrants	48,000	—	—	48,000
Private Placement Warrants - 2016	1,995,124	—	(9,000) (2)	1,986,124
Underwriting Warrants - Public Offering 2016	135,750	—	—	135,750
Private Placement Warrants - 2017	—	1,626,898	—	1,626,898
	<u>2,915,559</u>	<u>1,626,898</u>	<u>(50,889)</u>	<u>4,491,568</u>

- (1) During the six months ended June 30, 2017, there were 41,889 common stock warrants that were exercised through cashless exercises which resulted in 41,800 shares being issued.
- (2) During the six months ended June 30, 2017, there were 9,000 common stock warrants that were exercised through cashless exercises which resulted in 3,510 shares being issued.

NOTE 5—STOCKHOLDERS' EQUITY

Common Stock

Pursuant to our amended and restated certificate of incorporation, we are authorized to issue 47,000,000 shares of common stock. Holders of our common stock are entitled to dividends as and when declared by the Board of Directors, subject to rights and holders of all classes of stock outstanding having priority rights to dividends. There have been no dividends declared to date. Each share of common stock is entitled to one vote.

On February 22, 2017, we completed the private placement sale of 1,626,898 units at a price of \$4.61 per unit to one of our investors. Each unit consists of one share of our common stock and one warrant to purchase one share of our common stock at an exercise price of \$8.25 for a period commencing 6 months and ending 30 months after the closing of the financing. Gross proceeds were \$7.5 million. We incurred \$29,000 of legal expenses in connection with the financing. The shares were issued pursuant to a registration statement that was declared effective by the SEC in April 2017.

We have a Form S-3 universal shelf registration statement on file with the SEC. The universal shelf registration statement on Form S-3 permits us to sell, in one or more public offerings, shares of our common stock, shares of preferred stock or debt securities, or any combination of such securities and warrants to purchase securities, for proceeds in an aggregate amount of up to \$35.0 million, subject to limitations on the amount of securities we may sell in any twelve month period. As of June 30, 2017, we have raised a total of \$11.5 million of gross proceeds from the sale of 2,715,000 shares of our common stock, leaving approximately \$23.5 million of securities available for the issuance pursuant to the Form S-3. The Form S-3 will expire in May 2019.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, we are authorized to issue 3,000,000 shares of preferred stock. The Board of Directors has the authority, without action by our stockholders, to designate and issue shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. To-date, no preferred shares have been issued.

NOTE 6— STOCK-BASED COMPENSATION**2014 Omnibus Incentive Plan**

In January 2014, our board of directors approved the 2014 Omnibus Incentive Plan and amended and restated the plan in March 2014. Our stockholders approved the Amended and Restated 2014 Omnibus Incentive Plan, or the 2014 Plan, in March 2014. Our 2014 Plan initially permitted for the issuance of equity based instruments covering up to a total of 1,400,000 shares of common stock. In June 2016, our board of directors and stockholders approved an increase of 1,300,000 shares and in June 2017 approved an additional increase of 3,250,000 shares of common stock bringing the total shares allowed under the plan to 5,950,000.

Option Valuation

We have computed the fair value of options granted to employees and non-employees using the Black-Scholes option valuation model. The compensation costs of non-employee arrangements are subject to re-measurement at each reporting period over the vesting terms as earned. Option forfeitures are estimated at the time of valuation and reduce expense ratably over the vesting period. This estimate will be adjusted periodically based on the extent to which actual option forfeitures differ, or are expected to differ, from the previous estimate, when it is material. The expected term used for options issued to non-employees is the contractual life and the expected term used for options issued to employees is the estimated period of time that options granted are expected to be outstanding. We have estimated the expected life of our employee stock options using the “simplified” method, whereby, the expected life equals the arithmetic average of the vesting term and the original contractual term of the option due to our lack of sufficient historical data. For consultants we use an estimated expected life of the remaining term of the stock option grant, which is initially ten years. Since our stock has not been publicly traded for a sufficiently long period of time, we are utilizing an expected volatility figure based on a review of the historical volatilities, over a period of time, equivalent to the expected life of the instrument being valued, of similarly positioned public companies within our industry. The risk-free interest rate was determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the expected term of the instrument being valued.

Stock Options to Employees and Consultants

During the three and six months ended June 30, 2016, we granted incentive and non-qualified stock options for the purchase of 20,000 and 236,500 shares, respectively, of our common stock to our employees and a consultant. The stock options have an exercise price range of \$1.93 per share to \$4.00 per share with a term of 10 years. The stock options vest quarterly over sixteen quarters. The options granted had an aggregate grant date fair value of \$48,000 and \$301,000 for the three and six months ended June 30, 2016, respectively, utilizing the Black-Scholes option valuation model.

During the three and six months ended June 30, 2017, we granted incentive stock options for the purchase of 17,500 and 168,380 shares, respectively, of our common stock to our employees. The stock options have an exercise price range of \$4.36 per share to \$4.68 per share with a term of 10 years. Of the shares granted in 2017, 125,880 options vested upon grant and the remaining 42,500 stock options vest quarterly over sixteen quarters. The stock options granted had an aggregate grant date fair value of \$49,000 and \$446,000 for the three and six months ended June 30, 2017, respectively, utilizing the Black-Scholes option valuation model.

We estimated the fair value of stock options awarded during the six months ended June 30, 2016 and 2017 using the Black-Scholes option valuation model. The fair values of stock options granted for the periods were estimated using the following assumptions:

	Stock Option Grants Awarded During the Six Months Ended June 30, 2016	Stock Option Grants Awarded During the Six Months Ended June 30, 2017
Stock Price	\$1.93 to \$4.00	\$4.36 to \$4.68
Dividend Yield	0.00%	0.00%
Expected Volatility	60%	60%
Risk-free interest rate	1.49% - 1.74%	1.98% - 2.14%
Expected Life	7 years	7 years

Stock-based compensation expense related to stock options for employees was \$133,000 and \$101,000 for the three months ended June 30, 2016 and 2017, respectively and was \$263,000 and \$232,000 for the six months ended June 30, 2016

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and 2017, respectively. We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. For the three and six months ended June 30, 2016 we applied a forfeiture rate of zero as there had been minimal forfeitures to date. Beginning July 1, 2016, we applied a forfeiture rate of six percent which is reflected in our stock-based compensation expense related to stock options for the three and six months ended June 30, 2017.

In January 2017, we modified certain stock options previously granted to a former executive. The modification was made in connection with the executive's termination. The modification included accelerated vesting of stock options to purchase 8,752 shares of common stock as well as an extension of the exercise period for all vested shares, including stock options to purchase 17,504 shares of common stock. As a result of the modification, additional stock compensation expense of \$19,000 was recognized for the six months ended June 30, 2017. There was no expense related to the modification during the three months ended June 30, 2017.

For stock options paid in consideration of services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC 505-50. Non-employee stock option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these stock options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of stock options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the common stock options are fully vested. Stock-based compensation expense related to stock options for consultants was \$8,000 and \$2,000 for the three months ended June 30, 2016 and 2017, respectively and was \$14,000 and \$5,000 for the six months ended June 30, 2016 and 2017, respectively.

Stock Option Award Activity

The following is a summary of our stock option activity during the six months ended June 30, 2017:

	Number of Stock Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Life In Years
Outstanding, January 1, 2017	801,690	\$ 5.25	\$ 3.32	7.40
Granted	168,380	4.39	2.65	9.61
Exercised	(27,818)	1.95	1.16	—
Forfeited	(119,947)	5.55	3.68	—
Outstanding, June 30, 2017	822,305	\$ 5.14	\$ 3.21	7.91

	Number of Stock Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Life In Years
Exercisable, January 1, 2017	419,174	\$ 5.94	\$ 3.86	6.00
Vested	202,966	4.49	2.73	8.46
Exercised	(27,818)	1.95	1.16	—
Forfeited	(90,276)	6.07	4.04	—
Exercisable, June 30, 2017	504,046	\$ 5.55	\$ 3.53	7.40

The following table presents information related to stock options outstanding and exercisable at June 30, 2017:

Stock Options Outstanding		Stock Options Exercisable	
Exercise Price	Outstanding Number of Stock Options	Weighted Average Remaining Life In Years	Exercisable Number of Stock Options
\$1.93 – \$2.00	149,000	8.60	46,570
\$3.83 – \$4.70	238,380	9.48	144,321
\$5.06 – \$6.00	275,507	6.21	208,181
\$6.49 – \$7.20	56,728	6.04	41,423
\$7.54 – \$7.55	65,190	6.18	41,977
\$8.06 – \$12.98	37,500	7.61	21,574
	822,305	7.40	504,046

As of June 30, 2017, there was \$778,000 of unrecognized compensation expense related to unvested employee stock options, which is expected to be recognized over a weighted-average period of approximately 2.5 years. The aggregate intrinsic value of outstanding stock options and vested stock options as of June 30, 2017 were \$389,000 and \$127,000, respectively, which represent options whose exercise price was less than the closing fair market value of our common stock on June 30, 2017 of \$4.43 per share.

Restricted Stock Units Activity

We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. The fair value of non-employee restricted stock units awarded are remeasured as the awards vest, and the resulting increase in fair value, if any, is recognized as expense in the period the related services are rendered. During the three months ended June 30, 2016 and 2017 we recorded \$299,000 and \$715,000, respectively, of stock-based compensation related to the restricted stock unit shares that had been issued to-date. During the six months ended June 30, 2016 and 2017 we recorded \$537,000 and \$1,394,000, respectively, of stock-based compensation related to the restricted stock unit shares that had been issued to-date. Shares vested during the three months ended June 30, 2016 and 2017 were 42,114 and 141,970, respectively. Shares vested during the six months ended June 30, 2016 and 2017 were 176,390 and 452,200, respectively.

In January 2017, we modified certain restricted stock units previously granted to a former executive. The modification was made in connection with the executive's termination. The modification included accelerated vesting of 8,815 units which resulted in additional stock compensation expense of \$36,000 for the six months ended June 30, 2017. There was no expense related to the modification during the three months ended June 30, 2017.

A summary of restricted stock unit activity for the six months ended June 30, 2017 is as follows:

	Number of Restricted Share Units	Weighted-Average Grant-Date Fair Value
Outstanding at January 1, 2017	1,455,558	\$ 3.64
Granted	445,907	4.48
Vested	(452,200)	4.12
Forfeited	(44,873)	5.50
Outstanding at June 30, 2017	1,404,392	\$ 4.54

As of June 30, 2017, there was \$4.5 million of unrecognized compensation expense related to unvested employee restricted stock unit agreements which is expected to be recognized over a weighted-average period of approximately 2.7 years. For restricted stock unit awards subject to graded vesting, we recognize compensation cost on a straight-line basis over the service period for the entire award.

Performance Awards

In August 2016, we granted 250,000 performance-based restricted stock units to an executive. The restricted stock units are subject to performance-based vesting requirements, measured quarterly, based on the average of (a) the average high daily trading price of our common stock for each trading day during the last month of the applicable calendar quarter and (b) the average low daily trading price of our common stock for each trading day during the last month of the applicable calendar quarter, each as reported by The Nasdaq Stock Market, LLC. The restricted stock units are eligible to be earned on a quarterly basis based on a linear interpolation of the applicable share price, or in the case of a liquidation event, on the day of (or in connection with) such liquidation event based on the applicable transaction price. Once earned, the restricted stock units vest 50% on the date such restricted stock units become earned and 50% on September 30, 2019. We recognize compensation expense for restricted stock units with performance conditions using a graded vesting model, based on the probability of the performance condition being met, net of estimated pre-vesting forfeitures. The share price on the date of issuance was \$5.06 per share. For the three and six months ended June 30, 2017, we recognized \$6,000 and \$13,000, respectively, of stock compensation expense in connection with this award, which is included in general and administrative expenses.

Incentive Bonus Awards

We provide eligible employees, including executives, the opportunity to earn bonus awards upon achievement of predetermined performance goals and objectives. The purpose is to reward attainment of company goals and/or individual performance objectives, with award opportunities expressed as a percentage of base salary. Bonuses can be measured and paid quarterly and/or annually, and are paid in cash, equity or a combination of cash and equity, in the discretion of our compensation committee.

2015 Incentive Bonus Program

During 2015, our employees and executives participated in the 2015 Incentive Bonus Program. The awards under this program contained a combination of service conditions and performance conditions based on the achievement of specified performance thresholds approved by the board. The performance bonus amounts were based on each individual's salary paid during the year multiplied by a defined bonus multiplier percentage, plus an additional 10% bonus for non-executive employees. In February 2016, upon board approval, we granted 90,265 restricted stock unit awards, of which 45,140 shares vested on the issuance date and the remaining shares vested on January 1, 2017. For the six months ended June 30, 2016 we recorded a reduction of stock compensation expense of \$21,000 in connection with the 2015 Plan which was a result of the decrease in the price of our common stock between December 31, 2015 and the date of grant. There was no expense recorded for the three months ended June 30, 2016, or for the three and six months ended June 30, 2017, in connection with this program.

2016 Incentive Bonus Program

During 2016, our employees and executives participated in the 2016 Incentive Bonus Program. The program provided for the award of annual bonuses if certain performance goals, based on revenue and certain other non-monetary targets, were attained in our 2016 fiscal year. The bonus was payable in cash, restricted stock units or a combination of cash and restricted stock units, as determined by our compensation committee, with the number of restricted stock units to be determined by dividing the dollar value to be paid in restricted stock units by the average closing price of our common stock for the ten trading days ending on the last trading day of 2016. The restricted stock units would have vested in full on the tenth business day following grant. Although the specific performance objectives were not achieved, it was determined that a discretionary bonus would be awarded under the program based on the significant achievements made toward the objectives during the year. The payment method and terms remained the same as the original bonus program. The discretionary awards were granted in February, 2017, and consisted of cash awards totaling \$688,000 and equity awards in the form of restricted stock units and stock options which vested in full 10 days following grant. The equity awards consisted of 27,390 restricted stock units with a grant date fair value of \$119,000 based on the grant date share price of \$4.36 and 125,880 stock options with a grant date fair value of \$332,000 using the Black-Scholes option valuation model using the following assumptions: stock price of \$4.36; dividend yield of 0%; expected volatility of 60%; risk-free rate of 2.15% and expected life of 7 years. The total expense for these awards, \$1.1 million, was recorded in the fourth quarter of 2016 and was included in accrued salaries and payroll related expenses as of December 31, 2016. The accrual was released upon payment and issuance of the awards in the first quarter of 2017. There was no expense recorded for the three or six months ended June 30, 2016 and 2017 in connection with this program.

2017 Incentive Bonus Program

During 2017, our employees and executives are participating in the 2017 Incentive Bonus Program. The program provides for the award of quarterly and annual bonuses to our employees and executive officers if certain performance goals, based on company-wide billings, expenses and certain other individual non-monetary targets, are attained in quarterly and annual performance periods during our 2017 fiscal year. The awards contain a combination of service conditions and performance conditions based on the achievement of specified performance thresholds. The awards are based on each individual's annual salary multiplied by a bonus multiplier percentage which has been determined by our compensation committee. The plan also allows for additional discretionary awards to non-executive employees up to 10% of the total base salaries of non-executive employees. Additionally, the annual bonus is subject to the achievement of certain stock price thresholds for the ten trading days ending on the last trading day of 2017. The bonuses will be paid in the form of cash, stock options, restricted stock, or a combination thereof. The number of shares underlying equity awards granted to each employee will be determined based on the performance bonus amount to be paid in equity, divided by our closing stock price on the grant date. We recognize compensation expense for the total amount of the bonuses earned during the period earned. For the three and six months ended June 30, 2017, we recorded \$335,000 and \$750,000, respectively, of compensation expense related to the 2017 performance awards as the achievement of the performance conditions was considered probable. Of the expense recorded for the three months ended June 30, 2017, \$207,000 is included in research and development expenses and \$128,000 is included in general and administrative expenses. Of the expense recorded for the six months ended June 30, 2017, \$431,000 is included in research and development expenses and \$319,000 is included in general and administrative expenses.

Common Stock Issued for Services

In February 2016, we issued 3,000 shares of our common stock to a consultant in exchange for employment recruiting services. We recorded \$6,000 in stock compensation expense related to the stock issuance for the six months ended June 30, 2016, which represents the fair value of the stock on the dates of issuance. There was no expense related to this award for the three months ended June 30, 2016 and there were no similar items, or expense recorded, for the three and six months ended June 30, 2017.

Total equity-based compensation costs recorded in the condensed consolidated statements of operations is allocated as follows:

	Three Months Ended June 30, 2016	Three Months Ended June 30, 2017	Six Months Ended June 30, 2016	Six Months Ended June 30, 2017
Research and development				
Employees	\$ 182,000	\$ 309,000	\$ 326,000	\$ 535,000
Non-employees	7,000	15,000	12,000	41,000
Total research and development	189,000	324,000	338,000	576,000
General and administrative				
Employees and directors	231,000	317,000	434,000	684,000
Non-employees	20,000	24,000	26,000	98,000
Total general and administrative	251,000	341,000	460,000	782,000
Total equity-based compensation	\$ 440,000	\$ 665,000	\$ 798,000	\$ 1,358,000

NOTE 7—RELATED PARTY TRANSACTIONS

In August 2016, we entered into a consulting agreement with a member of our board of directors. Under the agreement, the board member would provide engineering design and fabrication advisory services for an hourly rate, with total payments not to exceed \$120,000 during any twelve month period. During the six months ended June 30, 2017, we incurred expenses of \$26,000 in connection with the consulting agreement. The agreement was terminated effective April 1, 2017 and there was no expense for the three months ended June 30, 2017.

NOTE 8— COMMITMENTS AND CONTINGENCIES

Commitments—In October 2013, we signed a lease for new office space for our corporate headquarters, and moved into the new location in the first quarter of 2014. The lease had a term of 38 months and a rental cost of approximately \$5,412 per month, increasing 3% annually after the first fourteen months. In addition, our share of building operating costs were estimated to be \$2,101 per month. In April 2014, we amended the lease to add additional space which increased our rent to \$8,286 per month beginning August 1, 2014 plus estimated monthly operating costs of \$3,154 and extended the lease term through July, 2017. We had a renewal option for an additional three year term. The original lease included a tenant improvement allowance of \$72,160 and the amended lease included an additional tenant improvement allowance of \$38,320. The allowances were used to construct our office build-out and have been capitalized as leasehold improvements as of December 31, 2016 and June 30, 2017. The capitalized costs are being amortized over the amended lease term through July 2017. Effective April 2017, we amended the lease to add additional space and to extend our lease term through July 2018, with an option to extend through July 2019. With the amendment, the total leased space is now 9,024 square feet with monthly rent of \$14,479 through July 2017 and \$13,987 from August 1, 2017 through the end of the lease, plus estimated monthly operating costs of approximately \$7,000.

In November 2013, we signed a lease for our satellite development office in Burlingame, CA. The lease had a two-year term, and rental costs of approximately \$4,000 per month. In May 2015, we renewed the lease for a one year period expiring November 30, 2016 with rental costs of \$5,000 per month. Effective December 16, 2016, we signed a new lease of 5,248 square feet of office space within the same building in Burlingame, California commencing February 2017. The lease has a five year term, and rental costs of approximately \$17,000 per month.

Rent expense related to our facilities and equipment for the three months ended June 30, 2016 and 2017 was \$52,000 and \$122,000, respectively and for the six months ended June 30, 2016 and 2017, was \$95,000 and \$211,000, respectively.

Legal Proceedings—We are occasionally involved in legal proceedings and other matters arising from the normal course of business.

Beginning on March 17, 2015, three putative class action lawsuits were filed in the United States District Court for the Central District of California, naming us, Terry Lingren and John Philpott as defendants. The three lawsuits were consolidated into a single putative class action, *In re Resonant Inc. Securities Litigation*, Case No. 15-cv-01970 SJO (MRWx). On February 23, 2016, the plaintiffs filed a consolidated second amended complaint, purporting to assert claims under the federal securities laws against us, Terry Lingren, John Philpott, and the underwriter of our May 29, 2014 IPO. In the consolidated second amended complaint, the plaintiffs purport to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between November 6, 2014 and April 2, 2015, as well as a class of persons or entities who purchased or acquired our shares in (or traceable to) our IPO. The plaintiffs alleged that, as a result of the defendants' allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices between November 6, 2014 and April 2, 2015. On July 11, 2016, the court entered an order granting in part and denying in part our motion to dismiss the consolidated second amended complaint. The court granted our motion to dismiss with respect to plaintiffs' claims under Section 11 of the Securities Act of 1933 and Section 20(a) of the Securities Exchange Act of 1934. The court also granted our motion to dismiss plaintiffs' claims under Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder to the extent those claims are premised on alleged misstatements made on February 26, 2015. The court denied our motion to dismiss with respect to plaintiffs' claims under Section 15 of the Securities Act of 1933, and with respect to plaintiffs' claims under Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder to the extent those claims are premised on alleged misstatements made in November and December of 2014 and January of 2015. On October 26, 2016, the court issued an order clarifying its July 11, 2016 order on our motion to dismiss, making clear that the court's actual intent was to grant the motion to dismiss with respect to the claims under Section 15 of the Securities Act of 1933, while denying the motion to dismiss with respect to the claims under Section 20(a) of the Securities Exchange Act of 1934.

The parties in the putative class action have reached a settlement that, if approved by the court, will fully resolve plaintiffs' claims and provide for the release of all claims asserted in the litigation. The settlement amount will be paid by our insurance carrier. On July 13, 2017, the court entered an order granting preliminary approval of the settlement. The court has scheduled a final approval hearing to take place on November 20, 2017. We can make no assurances that the court will grant final approval of the settlement.

On September 24, 2015, a purported shareholder derivative action was filed in the United States District Court for the Central District of California, and is pending before the same federal district court judge to whom the putative class action has been assigned. In the derivative action, the plaintiffs allege that certain of our officers and directors breached their fiduciary duties to us, including by allegedly violating the federal securities laws and exposing us to possible financial liability. On November 16, 2015, the court entered an order staying the proceedings in the shareholder derivative action pending certain further developments. The court has set a status conference to take place on September 11, 2017.

We intend to continue to defend ourselves vigorously in these actions.

We are not party to any other legal proceedings. We may, from time to time, be party to litigation and subject to claims incident to the ordinary course of business. As our growth continues, we may become party to an increasing number of litigation matters and claims. The outcome of litigation and claims cannot be predicted with certainty, and the resolution of any future matters could materially affect our future financial position, results of operations or cash flows.

We have directors' and officers' liability insurance, which will be utilized in the defense of these matters. The liability insurance may not cover all of the future liabilities we may incur in connection with the foregoing matters. As of June 30, 2017, we have incurred total legal expenses of approximately \$750,000 which is the maximum of our insurance deductible.

Legal fees and other costs associated with such actions are expensed as incurred. We assess, in conjunction with our legal counsel, the need to record a liability for litigation and contingencies. Litigation accruals are recorded when and if it is determined that a loss related matter is both probable and reasonably estimable. Material loss contingencies that are reasonably possible of occurrence, if any, are subject to disclosure. With respect to the litigation referred to above, we estimate that we are insured for all or substantially all of the amount of possible loss that might result from an adverse judgment or a settlement of these matters. We will evaluate developments in legal proceedings and other matters on a quarterly basis. As of June 30, 2016 and June 30, 2017, there was no litigation or contingency with at least a reasonable possibility of a material loss. No losses have been recorded during the six months ended June 30, 2016 and June 30, 2017, respectively, with respect to litigation or loss contingencies.

NOTE 9—SUBSEQUENT EVENTS

We evaluated subsequent events through August 9, 2017, the date of issuance of the condensed consolidated financial statements for the six months ended June 30, 2017.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements speak only as of the date of this Form 10-Q and are subject to uncertainties, assumptions and business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of the factors referenced in the subsection "Risk Factors" set forth in Part II, Item 1A of this Report and Part I, Item 1A of our Annual Report, and similar discussions in our other reports filed with the Securities and Exchange Commission. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Form 10-Q to conform these statements to actual results or to changes in our expectations, except as required by law.

The following discussion should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

Overview

Resonant is a late-stage development company that is creating an innovative software, intellectual property, or IP, and services platform that has the ability to increase designer efficiency, reduce the time to market and lower unit costs in the designs of filters for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end, or RFFE, is the circuitry in a mobile device responsible for analog signal processing and is located between the device's antenna and its digital baseband. The platform we are developing is based on fundamentally new technology that we call Infinite Synthesized Networks[®], or ISN[®], to configure and connect resonators, the building blocks of RF filters. Filters are a critical component of the RFFE used to select desired radio frequency signals and reject unwanted signals. Our ISN[®] platform allows us to develop unique, custom designs that address the increasing complexity of the RFFE due to carrier aggregation, or CA, by both reducing the size of the filter and improving performance. Our goal is to utilize our ISN[®] platform to support our customers in reducing their time to develop complex filter designs, to access new classes of filter designs, and to do it more cost effectively.

We are validating and commercializing our technology through the creation of filter designs that address the problems in the high growth RFFE industry created by the growing number of frequency bands in mobile devices. The worldwide adoption of Long Term Evolution (LTE) as the global standard, and the use of mobile devices to access the Internet, has resulted in massive proliferation of frequency bands which, when combined with CA for higher data rates and multiple-input multiple-output (MIMO), has resulted in an ever-increasing number and complexity of filters in the RFFE. We are developing a series of single-band surface acoustic wave, or SAW, filter designs for frequency bands presently dominated by larger and more expensive bulk acoustic wave, or BAW, filters. We are also developing multiplexer filter designs for two or more bands to address the CA requirements of our customers. Finally, we are developing unique filter designs, enabled by ISN[®], to replace multiple filters and associated componentry for many bands, with higher performance. In order to succeed, we must convince more RFFE suppliers that our filter designs can significantly reduce the size and cost of their products and have these designs integrated into the final product.

During the first half of 2017, we continued to make progress in the development of our technology in all areas of RF filter design. We added one new customer and expanded our filters under design with our existing customers. We expect these new development agreements to have a similar trajectory as we have described previously; development agreements have a six to nine month development cycle before they would be eligible for conversion to a licensing agreement. Once a licensing agreement is executed there is a nine to twelve month development cycle for ISN[®] Ready designs and 12 to 18 months for ISN[®] Pilot designs, before there would be a potential for end customer sampling and the potential for licensing revenue. During 2017 we announced that one of our licensee customers has successfully shipped over one million pre-production parts to four separate handset Original Equipment Manufacturers. These are the first shipments by the customer under the initial licensing agreement, which covers three frequency bands.

We believe licensing our designs is the most direct and effective means of validating our ISN[®] platform and related IP libraries to address this rapidly growing market. Our target customers make part or all of the RFFE. We intend to retain

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ownership of our designs, and we expect to be compensated through license fees and royalties based on sales of RFFE filters that incorporate our designs. We currently do not intend to manufacture or sell any physical products or operate as a contract design company developing designs for a fee.

We anticipate a significant delay between the start of a design and the start of royalty payments under a particular license. In some cases, we may grant the customer a limited period of exclusivity on a specific design or frequency band to enable the customer to be the first to market with the design. We do not expect any of these exclusivity provisions to have any long-term duration nor prevent us from concurrently working on filter designs in other bands for other customers.

We plan to continue to pursue filter design projects with existing and potential customers and other strategic partners. These types of arrangements may subsidize the expansion of our IP libraries and further the development of our ISN[®] platform, as well as offer complementary technology and market intelligence. We also intend to investigate the potential of licensing part or all of our ISN[®] software design suite to potential customers in the RFFE industry. However, we intend to retain ownership of our technology, software, designs and related improvements. Our goal is to establish and leverage alliances with new and existing customers, who will help grow the market for our designs by integrating them with their own proprietary technology and products, or by using our software products for their own designs, thus combining their own particular strengths with ours to provide an extensive array of solutions.

Our inception date is May 29, 2012. We commenced business on July 6, 2012 and completed our initial public offering, or IPO, on May 29, 2014.

We are using the net proceeds from our financings for product development to commercialize our technology, research and development, the development of our patent strategy and expansion of our patent portfolio, maturing and commercializing our ISN[®] tools, as well as for working capital and other general corporate purposes. Our costs include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities including travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with a late-stage, publicly-traded technology company. However, our costs are dependent on the nature of our development efforts and our success in commercialization. We anticipate adding employees for research and development, as well as general and administrative functions, to support our efforts. We expect to incur consulting expenses related to technology development and other efforts as well as legal and related expenses to protect our intellectual property.

The amounts that we actually spend for any specific purpose may vary significantly and will depend on a number of factors including, but not limited to, our expected cash resources, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, development and research, market conditions, and changes in or revisions to our marketing strategies. In addition, we may invest in complementary products, technologies or businesses.

As of June 30, 2017, we have 36 employees and use the services of several outside consultants. Of our employees, 27 are engaged in research and development and 9 in general and administrative activities.

Our patent portfolio at June 30, 2017 is comprised of more than 125 issued and pending patents.

We have earned minimal revenues since inception, and our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt. We have incurred accumulated losses totaling \$55.3 million from inception through June 30, 2017. Our losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up and operating costs including those related to financings and being a public company. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

Our condensed consolidated financial statements account for the continuation of our business as a going concern. We are subject to the risks and uncertainties associated with a new business. Our principal source of liquidity as of June 30, 2017 consists of existing cash and cash equivalents of \$9.1 million, which includes \$7.5 million we raised in February 2017 in a private placement of common stock and warrants. In the first half of 2017, we used approximately \$8.2 million in cash and investments. Due to these conditions, substantial doubt exists as to our ability to continue as a going concern. After evaluation of these conditions, we believe our current resources will provide sufficient funding for planned operations into 2018. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to existing investors or others, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and

ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty.

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, our management uses their judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate.

A description of our critical accounting policies that represent the more significant judgments and estimates used in the preparation of our financial statements was provided in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of our Annual Report on Form 10-K for the year ended December 31, 2016. There have been no material changes in these critical accounting policies since December 31, 2016.

Recently Issued and Adopted Accounting Pronouncements

Recent accounting pronouncements are detailed in Note 2 to our consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Results of Operations

Comparison of Three and Six Months Ended June 30, 2016 and 2017

Revenues. Revenues consist of the recognized portion of amounts received from customers for the development of our filter designs, milestone payments based on the achievement of specific milestones and royalties from shipments of our licensed designs. The revenues related to upfront payments associated with our filter design development contracts are recognized ratably over the estimated development period associated with that upfront payment. For the three and six months ended June 30, 2017, we recognized \$220,000 and \$376,000, respectively, of revenues primarily related to upfront payments in connection with customer contracts. For the three and six months ended June 30, 2016, we recognized \$63,000 and \$90,000, respectively, of revenue primarily related to upfront payments for the development of filter designs. We expect revenues to continue to be recorded due to the \$245,000 of deferred revenue we have recorded as of June 30, 2017. We also believe that based on the potential future milestone payments and royalties from our license agreements, there may be future revenues recorded.

Research and Development. Research and development expenses consist of the direct engineering and other costs associated with the development and commercialization of our technology, including the development of filter designs for our customers. These consist primarily of the cost of employees and consultants, including stock-based compensation, and to a lesser extent costs for equipment, software and supplies. We also include the costs for our intellectual property development program under research and development. This program focuses on patent strategy and invention extraction. Research and development expenses increased \$0.9 million from \$1.3 million in the second quarter of 2016 to \$2.2 million in the second quarter of 2017 and increased \$1.9 million from \$2.5 million for the first half of 2016 to \$4.4 million for the first half of 2017. The increases were the result of the increased payroll, benefit costs, consulting costs, travel and development costs related to increased activity on our various filter designs under development. We anticipate that our research and development expenses will continue to increase as a result of our planned growth.

General and Administrative Expenses. General and administrative expenses include salaries, stock-based compensation, taxes and employee benefits for the executives and administrative staff. It also includes expenses for corporate overhead such as rent for our facilities, travel expenses, telecommunications, investor relations, insurance, professional fees and business consulting fees. General and administrative expenses increased \$0.5 million, from \$1.6 million in the second quarter of 2016 to \$2.1 million in the second quarter of 2017 and increased \$1.5 million from \$3.3 million for the first half of 2016 to \$4.8 million for the first half of 2017. The increases include \$400,000 of senior executive transition costs in the first

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quarter of 2017. Other increases were due to the costs associated with increased headcount and travel expenses associated with business development efforts as well as increased rent expenses in connection with the expansion of our facilities to accommodate our growth. We anticipate that our general and administrative expenses will likely continue to increase as a result of planned growth.

Depreciation and Amortization Expense. Depreciation and amortization expense increased by \$38,000 from \$156,000 in the second quarter of 2016 to \$194,000 in the second quarter of 2017 and increased by \$81,000 from \$301,000 in the first half of 2016 to \$382,000 in the first half of 2017, primarily as a result of our increase in fixed assets and new equipment and software associated with the increase in employees and our product development efforts.

Interest and Investment Income. Interest and investment income increased by \$14,000 from \$2,000 in the second quarter of 2016 to \$16,000 in the second quarter of 2017 and increased by \$19,000 from \$6,000 in the first half of 2016 to \$25,000 in the first half of 2017, primarily due to increased cash and investment balances. We expect interest income to fluctuate in proportion to our cash and investment balances.

Income Taxes. We have earned minimal revenues and are currently operating at a loss. In the first half of 2016 our only tax liability was for minimum taxes in the States where we conduct business. With the acquisition of our foreign subsidiary, GVR, we are also responsible for income taxes in Switzerland related to the earnings of GVR. The provision for (benefit from) income taxes recorded in the three and six months ended June 30, 2017 represents the net change in deferred income taxes of GVR.

Liquidity and Capital Resources

Financing Activities

We have earned minimal revenues since inception. Our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt.

As of June 30, 2017, we have raised aggregate gross proceeds of \$53.1 million through the use of loans, convertible debt and equity through an IPO, private placement financings and secondary offering of our common stock.

We had current assets of \$9.5 million and current liabilities of \$2.1 million at June 30, 2017, resulting in working capital of \$7.4 million. This compares to working capital of \$4.6 million at June 30, 2016 and \$7.0 million at December 31, 2016. The change in working capital is primarily the result of proceeds from the issuance of equity offset by the use of cash in our normal business operations.

Our condensed consolidated financial statements account for the continuation of our business as a going concern. We are subject to the risks and uncertainties associated with a new business. Our principal source of liquidity as of June 30, 2017 consists of existing cash and cash equivalents of \$9.1 million, which includes \$7.5 million we raised in February 2017 in a private placement of common stock and warrants. In the first half of 2017, we used approximately \$8.2 million in cash and investments. Due to these conditions, substantial doubt exists as to our ability to continue as a going concern. After evaluation of these conditions, we believe our current resources will provide sufficient funding for planned operations into 2018. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to existing investors or others, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty.

We have a Form S-3 universal shelf registration statement on file with the SEC. The universal shelf registration statement on Form S-3 permits us to sell, in one or more public offerings, shares of our common stock, shares of preferred stock or debt securities, or any combination of such securities and warrants to purchase securities, for proceeds in an aggregate amount of up to \$35.0 million, subject to limitations on the amount of securities we may sell in any twelve month period. As of June 30, 2017, we have raised a total of \$11.5 million of gross proceeds from the sale of 2,715,000 shares of our common

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stock, leaving approximately \$23.5 million of securities available for the issuance pursuant to the Form S-3. The Form S-3 will expire in May 2019.

Cash Flow Analysis

Operating activities used cash of \$4.6 million in the first six months of 2016 and \$7.7 million in the first six months of 2017. The increase is primarily the result of increased payroll-related and travel costs associated with the increase in headcount as we have expanded our product development, business development and sales and marketing efforts. The increase is also due to senior executive transition costs incurred in the first quarter of 2017.

Investing activities used cash of \$1.6 million in the first six months of 2016 and provided cash of \$4.2 million in the first six months of 2017. In 2016, the cash used was a result of the net purchases of investments held to maturity and cash used to purchase property and equipment and expenditures for patents. In 2017, the cash provided was a result of the redemptions of investments held to maturity, offset by the cash used to purchase property and equipment and expenditures for patents.

Financing activities provided cash of \$5.2 million in the first six months of 2016 as a result of the net proceeds from the sale of equity securities in our private placement financing completed in April 2016. Financing activities provided cash of \$7.5 million in the first six months of 2017 as a result of the net proceeds from the sale of equity securities in our private placement financing completed in February 2017.

Off-Balance Sheet Transactions

We do not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not Applicable

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The phrase “disclosure controls and procedures” refers to controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934, as amended, or the Exchange Act, such as this Quarterly Report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the U.S. Securities and Exchange Commission, or SEC. Disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our chief executive officer, or CEO, and chief financial officer, or CFO, as appropriate to allow timely decision regarding required disclosure.

Our management, with the participation of our CEO and CFO, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of June 30, 2017, the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our CEO and CFO have concluded that as of June 30, 2017, our disclosure controls and procedures were designed at a reasonable assurance level and were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Controls over Financial Reporting

There was no change in our internal control over financial reporting during the quarter ended June 30, 2017 that materially affected, or is reasonable likely to materially affect, our internal control over financial reporting.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings

Beginning on March 17, 2015, three putative class action lawsuits were filed in the United States District Court for the Central District of California, naming us, Terry Lingren and John Philpott as defendants. The three lawsuits were consolidated into a single putative class action, *In re Resonant Inc. Securities Litigation*, Case No. 15-cv-01970 SJO (MRWx). On February 23, 2016, the plaintiffs filed a consolidated second amended complaint, purporting to assert claims under the federal securities laws against us, Terry Lingren, John Philpott, and the underwriter of our May 29, 2014 IPO. In the consolidated second amended complaint, the plaintiffs purport to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between November 6, 2014 and April 2, 2015, as well as a class of persons or entities who purchased or acquired our shares in (or traceable to) our IPO. The plaintiffs alleged that, as a result of the defendants' allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices between November 6, 2014 and April 2, 2015. On July 11, 2016, the court entered an order granting in part and denying in part our motion to dismiss the consolidated second amended complaint. The court granted our motion to dismiss with respect to plaintiffs' claims under Section 11 of the Securities Act of 1933 and Section 20(a) of the Securities Exchange Act of 1934. The court also granted our motion to dismiss plaintiffs' claims under Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder to the extent those claims are premised on alleged misstatements made on February 26, 2015. The court denied our motion to dismiss with respect to plaintiffs' claims under Section 15 of the Securities Act of 1933, and with respect to plaintiffs' claims under Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder to the extent those claims are premised on alleged misstatements made in November and December of 2014 and January of 2015. On October 26, 2016, the court issued an order clarifying its July 11, 2016 order on our motion to dismiss, making clear that the court's actual intent was to grant the motion to dismiss with respect to the claims under Section 15 of the Securities Act of 1933, while denying the motion to dismiss with respect to the claims under Section 20(a) of the Securities Exchange Act of 1934.

The parties in the putative class action have reached a settlement that, if approved by the court, will fully resolve plaintiffs' claims and provide for the release of all claims asserted in the litigation. The settlement amount will be paid by our insurance carrier. On July 13, 2017, the court entered an order granting preliminary approval of the settlement. The court has scheduled a final approval hearing to take place on November 20, 2017. We can make no assurances that the court will grant final approval of the settlement.

On September 24, 2015, a purported shareholder derivative action was filed in the United States District Court for the Central District of California, and is pending before the same federal district court judge to whom the putative class action has been assigned. In the derivative action, the plaintiffs allege that certain of our officers and directors breached their fiduciary duties to us, including by allegedly violating the federal securities laws and exposing us to possible financial liability. On November 16, 2015, the court entered an order staying the proceedings in the shareholder derivative action pending certain further developments. The court has set a status conference to take place on September 11, 2017.

We intend to continue to defend ourselves vigorously in these actions.

We are not party to any other legal proceedings. We may, from time to time, be party to litigation and subject to claims incident to the ordinary course of business. As our growth continues, we may become party to an increasing number of litigation matters and claims. The outcome of litigation and claims cannot be predicted with certainty, and the resolution of any future matters could materially affect our future financial position, results of operations or cash flows.

Item 1A. Risk Factors

This Quarterly Report on Form 10-Q contains forward-looking statements, which are subject to a variety of risks and uncertainties. Other actual results could differ materially from those anticipated in those forward-looking statements as a result of various factors, including those set forth in the risk factors relating to our business and common stock contained in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2016. There have been no material changes to such risk factors during the period ended June 30, 2017, except for the following.

Our business could be negatively affected as a result of actions of activist stockholders, and such activism could impact the trading value of our securities.

Stockholders may, from time to time, engage in proxy solicitations or advance stockholder proposals, or otherwise attempt to effect changes and assert influence on our board of directors and management. While we strive to maintain constructive, ongoing communications with all of our stockholders, and welcome their views and opinions with the goal of enhancing value for all stockholders, activist campaigns that contest or conflict with our strategic direction or seek changes in the composition of our board of directors could have an adverse effect on our operating results and financial condition. A proxy contest would require us to incur significant legal and advisory fees, proxy solicitation expenses and administrative and associated costs and require significant time and attention by our board of directors and management, diverting their attention from the pursuit of our business strategy. Any perceived uncertainties as to our future direction and control, our ability to execute on our strategy, or changes to the composition of our board of directors or senior management team arising from a proxy contest could lead to the perception of a change in the direction of our business or instability which may be exploited by our competitors, result in the loss of potential business opportunities, and make it more difficult to pursue our strategic initiatives or attract and retain qualified personnel and business partners, any of which could adversely affect our business and operating results. If individuals are ultimately elected to our Board with a specific agenda, it may adversely affect our ability to effectively implement our business strategy and create additional value for our stockholders. We may choose to initiate, or may become subject to, litigation as a result of the proxy contest or matters arising from the proxy contest, which would serve as a further distraction to our board of directors and management and would require us to incur significant additional costs. In addition, actions such as those described above could cause significant fluctuations in our stock price based upon temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

Item 5. Other Information

On August 7, 2017, the Compensation Committee of our Board of Directors and, in the case of our Chief Executive Officer, our Board of Directors, approved quarterly bonus awards to our executive officers pursuant to our 2017 Incentive Bonus Program for their performance during the second quarter of 2017. The bonus awards were paid in the form of incentive stock options to purchase shares of our common stock in the amounts set forth below. The stock options have a term of 10 years and an exercise price of \$4.51, the closing sales price of our common stock on the date of grant, and vest in full on August 16, 2017.

Executive Officer	Number of Option Shares
George Holmes	5,824
Jeff Killian	6,655
Robert Hammond	6,904
Neal Fenzi	5,133

Item 6. Exhibits

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File Number	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of the Registrant	8-K	001-36467	3.1	6/5/2014	
3.2	Amended and Restated Bylaws of the Registrant	8-K	001-36467	3.2	6/5/2014	
10.1*	Amendment No. 2 to the Resonant Inc. Amended and Restated 2014 Omnibus Incentive Plan	S-8	333-218542	10.3	6/7/2017	
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

* Each a management contract or compensatory plan or arrangement.

The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of section 18 of the Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of Resonant Inc. under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 9, 2017

Resonant Inc.

By: /s/ Jeff A. Killian
Jeff A. Killian
Chief Financial Officer
(Principal Financial and Accounting Officer)

**Certification of Principal Executive Officer Pursuant To
Exchange Act Rules 13a-14(a) and 15d-14(a),
As Adopted Pursuant To
Section 302 of Sarbanes-Oxley Act of 2002**

I, George B. Holmes, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Resonant Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2017

/s/ George B. Holmes

George B. Holmes
Chief Executive Officer
(Principal Executive Officer)

**Certification of Principal Financial Officer Pursuant To
Exchange Act Rules 13a-14(a) and 15d-14(a),
As Adopted Pursuant To
Section 302 of Sarbanes-Oxley Act of 2002**

I, Jeff A. Killian, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Resonant Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2017

/s/ Jeff Killian

Jeff Killian

Chief Financial Officer

(Principal Financial and Accounting Officer)

**Certifications of Principal Executive Officer and Principal Financial Officer
Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant To
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350), George B. Holmes, Chief Executive Officer (Principal Executive Officer) and Jeff A. Killian, Chief Financial Officer (Principal Financial and Accounting Officer) of Resonant Inc. (the "Company"), hereby certifies that, to the best of his knowledge:

1. Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, to which this Certification is attached as Exhibit 32.1 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 9, 2017

/s/ George B. Holmes
George B. Holmes
Chief Executive Officer
(Principal Executive Officer)

/s/ Jeff A. Killian
Jeff A. Killian
Chief Financial Officer
(Principal Financial and Accounting Officer)