

August 29, 2017



Resonant to Present Research Papers on Innovative RF Filter Design Technology at International Ultrasonics Symposium (IUS)

GOLETA, CA -- (Marketwired) -- 08/29/17 -- Resonant Inc. (NASDAQ: RESN), a designer of filters for radio frequency, or RF, front-ends that specializes in delivering designs for difficult bands and complex requirements, today announced that it will present several papers and research findings at the International Ultrasonics Symposium (IUS), which will be held September 5-9, 2017 at the Omni Shoreham Hotel in Washington, DC.

Four new papers, which highlight innovative RF filter design technology, will be presented. Two of these papers will be presented via displayed poster, and two via oral presentations. The four papers include:

- ***Design and Characterization of SAW filters for High Power Performance***(Poster)- Higher data-rates are driving the need to process higher powers in mobile phones. Combined with smaller filter footprints, this represents a significant challenge for mobile filters. This paper introduces novel design techniques to design for high power.
- ***Parametric Study of the resonant TC-SAW Piston-mode Configurations*** (Poster) - TC-SAW is used to maintain the performance of mobile filters at low and high temperatures. However, the design of these structures is complex. This study shows how to design using TC-SAW and evaluates the performance of a difficult mid-band duplexer using this technique.
- ***Acoustic Radiation from ends of IDT in Synchronous Resonators***(Oral) - Dr. Victor Plessky, Resonant's Director of Engineering, will discuss how Finite Element Modeling is used to characterize the major loss mechanisms that impact filter performance for different resonator structures.
- ***FEM modeling of an entire 5-IDT CRF/DMS Filter***(Oral) - Dr. Plessky will discuss how smaller filter footprints require more complex 3D structures which are difficult to model, and therefore more difficult to design. He will show how a FEM model of complex multi-layer filter structures is useful in reducing filter size.

The IUS conference, organized by the Institute of Electrical and Electronics Engineers (IEEE) is the premier annual forum for researchers to present new results and learn about recent advances in medical and industrial ultrasonics. Over a thousand scientists and engineers attended each of three recent symposia in Chicago (2014), Taipei (2015), and Tours (2016). The event consists of four days of events, including technical paper presentations, workshops and short courses. The symposium also includes the annual IEEE Ultrasonics Awards to recognize outstanding contributions in the field of ultrasonics.

"Resonant is presenting several very significant and timely papers, which detail novel design methods applied to critical problems in the RF Front-End," said George Holmes, CEO of Resonant. "By using Resonant's technical team, innovative technology and ISN design suite,

we can address the opposing filter drivers of higher power and reduced footprint at high and low temperatures. As we look to 5G, these opposing drivers will only worsen and exacerbate the demands on filter designs and designers."

About Resonant Inc.

Resonant is creating software tools and IP & licensable blocks that enable the development of innovative filter designs for the RF front-end, or RFFE, for the mobile device industry. The RFFE is the circuitry in a mobile device responsible for the radio frequency signal processing and is located between the device's antenna and its digital baseband. Filters are a critical component of the RFFE that selects the desired radio frequency signals and rejects unwanted signals and noise. For more information, please visit www.resonant.com.

About Resonant's ISN[®] Technology

Resonant can create designs for hard bands and complex requirements that we believe have the potential to be manufactured for half the cost and developed in half the time of traditional approaches. The Company's large suite of proprietary mathematical methods, software design tools and network synthesis techniques enable it to explore a much bigger set of possible solutions and quickly derive the better ones. These improved filters still use existing manufacturing methods (i.e. SAW) and can perform as well as those using higher cost methods (i.e. BAW). While most of the industry designs surface acoustic wave filters using a coupling-of-modes model, Resonant uses circuit models and physical models. Circuit models are computationally much faster, and physical models are highly accurate models based entirely on fundamental material properties and dimensions. Resonant's method delivers excellent predictability, enabling achievement of the desired product performance in roughly half as many turns through the fab. In addition, because Resonant's models are fundamental, integration with its foundry and fab customers is eased because its models speak the "fab language" of basic material properties and dimensions.

Safe Harbor/ Forward-Looking Statements

This press release contains forward-looking statements, which include, among others, statements about the capabilities of our filter designs. Forward-looking statements are made as of the date of this document and are inherently subject to risks and uncertainties which could cause actual results to differ materially from those in the forward-looking statements, including those described under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report (Form 10-K) or Quarterly Report (Form 10-Q) filed with the Securities and Exchange Commission. Forward-looking statements are made as of the date of this release, and we expressly disclaim any obligation or undertaking to update forward-looking statements.

Investor Relations Contact:

Greg Falesnik

MZ North America

1-949-385-6449

Greg.Falesnik@mzgroup.us

Source: Resonant Inc.