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Movers & Shakers Interview with Dr. Greg Galvin – CEO Kionix, Inc.

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"We Accelerate Growth"

Dr. Greg Galivn
CEO

Dr. Galvin founded Kionix in 1993 to commercialize a novel micromechanical technology pioneered by researchers at Cornell University. From 1993 to 2000, Kionix grew from its two founders to over 40 employees and developed products in inertial sensors, microfluidics, data storage, micro-relays, and micro-optics. Late in 2000, Kionix was acquired for its optical switching technology by Calient Networks of San Jose, CA and renamed Calient Optical Components. Just prior to the acquisition, a new company was spun out to the then Kionix shareholders to pursue inertial sensor, microfluidics, and data storage markets. This company regained the Kionix name post acquisition. From the acquisition until June 2002, Dr. Galvin served as President and CEO of Calient Optical Components and on the boards of both Calient Networks and the new Kionix. In July 2002, he returned full time to Kionix as President and CEO and advanced the Company to its 2009 acquisition as a wholly-owned subsidiary by Rohm Co., Ltd. of Japan. In addition to continuing service as Kionix's President and CEO, Dr. Galvin also serves as Chairman of Rheonix, Inc., a corporate entity established in December 2008 to commercialize a unique polymer chip microfluidic technology developed by Kionix scientists.

Dr. Galvin has a B.S. from the California Institute of Technology in Electrical Engineering and a Ph.D. in Materials Science and M.B.A. from Cornell University. Dr. Galvin served for over five years as the Deputy Director of the Cornell Nanofabrication Facility (CNF) in which the Cornell micromechanical research was conducted. Prior to founding Kionix, he was employed by Cornell University as Director of Corporate Research Relations, focusing on transferring technology from the university to industry. Dr. Galvin's graduate research was in the areas of thermodynamics of silicon under ultrafast melting, ion beam analysis, and thin film technologies. He is a member of several scientific societies, has published over 20 technical papers, and holds 58 patents. Dr. Galvin is a founding member, and former chairman, of the Finger Lakes Entrepreneurs Forum. He is a member of the Cornell University Council, Advisory Council of the Cornell Engineering College, and serves as a Director of the Boyce Thompson Institute for Plant Research, Tompkins County Area Development, Inc., the Kensa Group, the El Portal de Belén Foundation, and Ithaca's Sciencenter. A leading authority on MEMS product innovation, Dr. Galvin is frequently invited to speak at meetings and conferences in the United States, Europe, and Asia.

Could you please describe how the years 2008 and 2009 were for the motion sensors industry and for Kionix?

Greg: Both were good years and both showed continued Year over Year growth, largely courtesy of the mobile handset market which had increasing adoption of accelerometers. We didn't really see much impact of the global economic decline and did not track with the decline in other semiconductor sales in the 2008 – 2009 periods. I have to believe that our growth rates were somewhat slower than they would have been absent the overall economic condition. But instead of declining we actually continued to grow during that period both as an overall industry and our company's individual revenues as well. We definitely saw softness in our sales of products that go in to the PC sector as that market place pretty much shut down during the decline but what offset that was the adoption of accelerometers in the smart phones segment – sales of smart phones was higher than expected.

In 2009, Kionix merged with ROHM. What is the significance of this especially in this economic climate?

Greg: It does a number of very positive things for Kionix. It gives the financial stability of a multi billion dollar semiconductor parent as well as access to a broader array of technology and processes than we could develop being on our own, as well as access to sales network worldwide with some 800 sales people versus our 14 people. So it is a great combination. ROHM's customers were pushing ROHM to sell them accelerometers and other inertial sensors in addition to the existing ROHM sensor product portfolio.

At some point, the Kionix shareholders had to get liquidity in their investment by either going public or being acquired by someone else. In this case, becoming part of a large semiconductor manufacturer seemed to be a more appropriate choice because it puts us on a much more equal footing with respect to our major competitors such as STMicroelectronics, Analog Devices, Bosch Sensortec, and the like.

Kionix has been named SONY Green Partner. What is the significance of this?

Greg: It has two aspects to it. One is it is a requirement for doing business with SONY, who is a major consumer of inertial sensor products. Secondly, the SONY Green Partner certification has been recognized broadly in the industry as a demonstration of a company's commitment to good environmental practices. So in addition to being a requirement to do business with SONY, the certification gives us good recognition industry-wide.

How important is it for a sensor company like Kionix to demonstrate compliance with the requirements for environmental sustainability?

Greg: I think it falls in the category of good business practices. As our products are sold to customers who incorporate them into their products, which then in turn may be incorporated into yet another company's products before reaching the consumer, we are somewhat shielded from the consumer demands for sustainability. The more directly consumer facing companies are the ones most effected by the public interest for sustainability. Nevertheless, as a responsible corporate citizen we must too be concerned with sustainability in operating our business.

What are the emerging markets that Kionix is pursuing?

Greg: We certainly see continued very strong business and growth opportunities in our existing markets, but in terms of emerging markets the one that I would probably focus most on is the broad area of things related to healthcare, anything from patient monitoring like activities such as sports and fitness type applications. We see growing interest in measuring physical activity/inactivity relating to health and wellbeing.

What are your biggest challenges post-recession?

Greg: Certainly our industry continues to be extremely competitive. I would have actually expected a few more participants in our markets to have dropped out of business. It did not happen. Pricing continues to be probably the biggest challenge. Customers are still continuing to enjoy quarter over quarter price reduction at the expense of suppliers. Continuing to make money in this market place is probably our biggest challenge as well as –a lesser challenge but still difficult is responding to rapid growth of the market place – growing our capacity.

How are you going to overcome / address these challenges?

Greg: The primary one is finding ways to continue to make our products at lower costs while maintaining the performance. It is extremely difficult in that the normal semiconductor manufacturing model is to get more die per wafer by shrinking line widths. In the MEMS world we cannot employ that methodology as smaller inertial sensors inherently have poorer performance than larger ones, they simply have less mass. Hence our challenge is to shrink the size of our devices, to get more per wafer and thereby lower cost, without sacrificing the performance of the sensor – a big engineering challenge.

How are you going to differentiate yourselves from the rest of the competition?

Greg: By making better products. One of the areas where we are seeing differentiation in this market place is in sensors with more advanced features. Many of the customers, particularly in the handset world, have no interest in seeing acceleration as an output. They want features, screen rotation features or user interface algorithms. They want those built into the accelerometer. One of the things that is starting to differentiate suppliers in our industry is how much algorithm development and how much motion physics the company is working on to provide to their customers.

As a conclusion what kind of role can we expect Kionix to play in shaping the future of the motion sensors market?

Greg: We expect to see us continue to grow in volumes and market shares one of the dominant suppliers in the market place along with an increasingly broad product portfolio.

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