



Advanced Photonix, Inc. Awarded High-Speed Photodiode Technology Patent

ANN ARBOR, Mich., Nov 19, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Picometrix, LLC, an Advanced Photonix company (NYSE Amex: API), announced that it has been awarded patent 7,078,741 for enhanced responsivity photodiodes and 7,468,503 for planar photodiodes by the United States Patent and Trademark Office.

These technologies can be used individually or in combination and are deployed in the company's high-speed optical receiver product offerings. They enable increased responsivity, higher optical power handling capacity and can be utilized across both the C and L wavelength bands, resulting in industry leading optical receiver product performance for the 40G and emerging 100G telecommunication markets. Picometrix's receiver products are incorporated into high-speed optical communications equipment deployed in the telecommunications super highway to support high definition video, data and voice users worldwide.

The patented photodiodes are high reliability structures that accept light in a surface-normal geometry, achieve industry-leading responsivity, up to 0.85 amps per watt at 40G, and are capable of handling high optical input power. This patented surface normal design does not require complicated semiconductor optics to illuminate the photodiode, such as spot size converters which are necessary for waveguide photodiodes. As a result, a product based upon these patented photodiodes covers both the C and L wavelength bands, is indifferent to optical polarization states, and has superior reliability compared to mesa waveguide photodiodes. Indifference to polarization changes in leading edge optical communication systems is important in maintaining transmission integrity due to the constantly changing polarization state of the incoming light.

"Proprietary, patented technology like this helps us differentiate our products in the market," says Robin (Rob) Risser, President and General Manager of Picometrix and CFO of API. "Our products always meet or exceed stringent industry performance and reliability standards and offer best in class value to our customers. Our patented photodiodes can be used for both C band and L band wavelengths and as a result can simplify customer material management and reduce their inventory requirements. In addition, indifference to polarization changes improves our product uniformity across operating conditions which can contribute to improved customer manufacturing yield. Our high reliability planar photodiode structure also offers our customers the comfort of long term reliability they have become accustomed to with lower speed legacy systems. We look forward to continuing to provide superior customer value through our technological leadership in high speed optical receivers for the next generation 40G and emerging 100G telecommunications equipment."

About Advanced Photonix, Inc.

Advanced Photonix, Inc. (R) (NYSE Amex: API) is a leading supplier with a broad offering of optoelectronic products to a global customer base. We provide optoelectronic solutions, high-speed optical receivers and terahertz instrumentation for telecom, homeland security, military, medical and industrial markets. With our patented technology and state-of-the-art manufacturing we offer industry leading performance, exceptional quality, and high value added products to our OEM customer base. For more information visit us on the web at www.advancedphotonix.com.

The information contained herein includes forward looking statements that are based on assumptions that management believes to be reasonable but are subject to inherent uncertainties and risks including, but not limited to, unforeseen technological obstacles which may prevent or slow the development and/or manufacture of new products; potential problems with the integration of the acquired company and its technology and possible inability to achieve expected synergies; obstacles to successfully combining product offerings and lack of customer acceptance of such offerings; limited (or slower than anticipated) customer acceptance of new products which have been and are being developed by the Company; and a decline in the general demand for optoelectronic products. API-G

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