

**FOR IMMEDIATE RELEASE**

## **Arradiance Receives New Patent Allowances for Exclusive Right to Manufacture Large Area Nanofilm Activated Microchannel Plate Detectors**

**Further patent protection announced for nanofilm electron resistive and emissive coatings deposited by Atomic Layer Deposition that increase lifetime, detector area and gain to levels unattained by conventional methods.**

Sudbury, MA April 24, 2012 – Arradiance, Inc. today announced the allowance by the United States Patent Office of two fundamental patent applications claiming the use of nanofilm technology including films deposited using Atomic Layer Deposition as the resistive element in microchannel amplification devices. These allowances are the latest in a long list of Arradiance patents covering this method of producing microchannel plates.

Arradiance has focused on developing substrate independent microchannel plates (MCP) since 2004 amassing an impressive Intellectual Property (IP) portfolio. IP ranges from USP#5,729,244, "Field emission device with microchannel gain element" describing the first silicon-based microchannel amplifier with novel resistive and emissive nanofilms to USP#7,855,493 covering the use of down-pore high secondary electron emission materials to enhance MCP performance and lifetime. The recently allowed patents cover conductive nanofilms. These functional nanofilms represent the key element for substrate independence and the enabling technology for very large area detection systems. In all, Arradiance possesses ten patents in this area including two others that claim the use of nanofilm-activated MCP technology in applications that require a vacuum tube detection system such as those used for image intensifying and event detection.

"These newly allowed patents are the final pieces required to protect our development of cost-effective and robust fabrication of large-area MCP detectors," said David Beaulieu, COO of Arradiance. "Arradiance's suite of patented technologies, coupled with large-area glass capillary array plates, enables high volume manufacturing of MCP detector-based devices at a considerable cost reduction. Arradiance's new fabrication technology will open the higher performing MCP devices to a wide range of important applications, such as the medical and homeland security markets that can now take advantage of the extended life, low noise and high efficiency performance of the nanofilm MCP device."

"Arradiance's strategy since our first patent application has been to fundamentally change the way MCPs are made," stated Arradiance CEO, Ken Stenton. "our patent portfolio now includes patents that claim the enabling technologies required to implement this vision from MCP to finished detection device. Arradiance now claims exclusive patent right to nanofilm electron resistive and emissive coatings deposited by Atomic Layer Deposition technology for use in MCPs. Arradiance is the only company that has demonstrated the capability to develop, manufacture and support this important technology within critical scientific, medical and national security applications."

### **About Arradiance**

*Arradiance is enabling us to better perceive the hidden world all around us. Their functional film technologies greatly enhance the performance of imaging and detection systems, providing resolution, gain and lifetime improvements that were previously unattainable. Their enabling processes and products will open the door to a new world of flexible, robust, electro-optic systems that will change the way we see our world. Founded in 2003, Arradiance, a privately-held Massachusetts based product and technology company, is committed to bringing novel solutions to difficult problems.*

**Learn more at [www.arradiance.com](http://www.arradiance.com)**

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