ESPOO, Finland, 28th September, 2016 – Picosun Oy, the leading provider of high quality industrial ALD (Atomic Layer Deposition) technology, has patented a novel ALD nanolaminate to protect electronics such as smartphones, tablets, computers, and lighting devices from overheating.

As both consumer and industrial electronics become faster, smaller, and more efficient day by day, overheating of the components such as batteries, microprocessors, and LEDs has become one of the key problems in the industry. Overheating leads to performance losses, failures in operation, and shortening of the device lifespan – and even to direct dangers, as heated batteries pose a risk of explosion.

Picosun’s patented(*) ‘phonon superhighway’ nanolaminate coating conducts heat efficiently away from the device interior, decreasing its temperature even 20 degrees. The heat is distributed through the casing of the device, along its surface. The coating can be applied at low temperatures on large batches of items with fast and cost-efficient processing in Picosun’s fully automated production ALD reactors.

“Our aim at Picosun is to utilize the ALD method not only to advance technological development, but also to improve the usability, safety, and lifetime of technical devices. Our new, patented nanolaminate coating addresses directly these challenges by solving one of the key problems in today’s electronics – overheating of the components. Many world-leading electronics manufacturers have already expressed interest towards our invention. We are excited to present this novel ALD solution to our customers to help them improve the performance, reliability, and safety of their products,” states Juhana Kostamo, Managing Director of Picosun.

(*)Application no. WO2016146881; “Heat-conductive ALD Coating in an Electrical Device”

Picosun provides the most advanced ALD thin film coating technology to enable the industrial leap into the future, with turn-key production solutions and unmatched expertise in the field. Today, PICOSUN™ ALD equipment are in daily manufacturing use in numerous major industries around the world. Picosun is based in Finland, with subsidiaries in North America, Singapore, Taiwan, China, and Japan, and a world-wide sales and support network. For more information visit www.picosun.com.