

NovaCentrix[®] Awarded U.S. Patent Critical for Sintering Metal Inks on Low Temperature Substrates

Austin, TX, November 1, 2010 – NovaCentrix, a leader in printed electronics manufacturing technologies, announced today that U.S. Patent #7,820,097 entitled “Electrical, Plating and Catalytic Uses of Metal Nanomaterial Compositions” has been issued by the U.S. Patent and Trademark Office.

NovaCentrix's patent covers in part the use of flash lamps to sinter metal-based inks and materials on low-temperature substrates such as paper and plastic and includes high-speed and roll-to-roll processing. This process is critical to the advancement of innovative new products in photovoltaics, displays, RFID, sensors, batteries, capacitors, and smart packaging. As industry recognition, NovaCentrix received an R&D100 award for the development of this technology in 2009 as well as recognition by industry analyst group IDTechEx in 2008.

“One of the most exciting aspects of this technology is its scalability and economy. Inexpensive flexible substrates can now be used. Furthermore, processing can be performed at hundreds of feet per minute in a roll-to-roll environment,” said Dr. Kurt Schroder, Chief Scientist and lead patent author. “In addition to processing silver, gold, and nickel used in conductive inks, the high speed process can sinter easily-oxidized particles such as copper in an ambient air environment, thus eliminating the need for a reduction furnace or inert atmosphere. This room-temperature process enables truly inexpensive conductive traces for printed electronics.”

“Our patent validates and sustains NovaCentrix's position as a lead innovator in commercialized printed electronics technologies including our PulseForge[®] tools that apply Photonic Curing[™] processing,” said Charles Munson, CEO and President of NovaCentrix. “Our customers may use licensed PulseForge tools in their manufacturing processes without infringing this valuable patent.”

PulseForge tools use the Photonic Curing process to heat thin films on low temperature substrates using novel flash lamp and power supply technology to deliver continuously adjustable, megawatt intensity, microsecond resolution pulses of broad-spectrum light. Unlike traditional oven technologies, the transient nature of the patented process heats thin films to a high temperature on low-temperature substrates, such as polymers, without causing damage. By adjusting the pulse attributes using the touch-screen interface, temperature profiles in the film and substrate can be closely controlled and optimized for drying, sintering, annealing, and modulating chemical reactions in thin films to achieve high-performance properties at high-speed roll-to-roll processing rates.

About NovaCentrix. NovaCentrix, based in Austin, Texas, is a leader in printed electronics manufacturing technologies. The company's PulseForge tools sinter functional inks in milliseconds on low-temperature, flexible substrates such as paper and plastic. NovaCentrix's tools process a wide array of metal-based conductive inks, as well as non-metallic and semiconductor inks. NovaCentrix also offers high-performance, economical Metalon[®] conductive inks which work optimally with PulseForge tools. To learn more, please visit www.novacentrix.com.

Contact:

Stan Farnsworth
VP Marketing
512.491.9500 x210
stan.farnsworth@novacentrix.com