Kodak demonstrates power of new transparent conductive films with multi-touch technology

Azoteq becomes the first company to integrate Kodak PEDOT technology with a capacitive touch screen controller

(ROCHESTER, NY January 30, 2013) – The Commercial Films Group of Eastman Kodak Company, together with Heraeus Conductive Polymers, GSI Technologies and Azoteq – a world leader in capacitive proximity solutions – have announced breakthrough capacitive touch screen technology that incorporates a new two-sided transparent conductive film and touch screen controller for use in a variety of printed electronics applications.

The Azoteq IQS550 Capacitive Touch Screen Controller is the first device capable of interfacing with PEDOT sensors, marking a change in the way touch screen displays for handsets and tablet devices are manufactured.

The transparent projected capacitive sensor used with the IQS550 is constructed with Kodak HCF-225 Film/ESTAR™ Base and features Clevios™ PEDOT:PSS conductive layers on each side of the film – to save on both thickness and cost.

The invisible patterning process utilizes Heraeus component technologies. First, GSI Technologies screen prints a resist pattern onto Kodak HCF-225 Film/ESTAR™ Base using Clevios™ SET S – a masking polymer. Clevios™ Etch is then used to create the non-conductive areas. After the process is completed, the masking polymer that protected the conductive pattern is removed.

For the past year, Kodak has been working with the Conductive Polymers Division of Heraeus Precious Metals GmbH & Co. KG, producer of Clevios™ PEDOT:PSS, and the Functional Printing Division of GSI Technologies to create technologically advanced transparent conductive films featuring completely invisible patterns.

"Azoteq selected the Kodak PEDOT film for touch screens and trackpads because it offers high transmissivity and the ability to be formed into unique sensors,” Dr. Frederick Bruwer, Azoteq CEO said. “In addition the patterning is completely invisible to the naked eye and can be manufactured as a two-sided sensor that significantly reduces cost.”

“The IQS550 platform represents a milestone in flexibility for Azoteq,” added Dr. Bruwer. “Azoteq will offer the IQS550 Touch Screen Controller as the first configuration with other products from the same platform coming to market shortly.”

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“Kodak, in conjunction with Heraeus, has developed a unique, scale-able process by which patterned transparent conductors are easily manufactured for touch screen applications,” commented GSI Technologies’ CTO Dr. Gordon Smith. “We found the Kodak HCF-225 Film/ESTAR™ Base to be of very high quality and the Clevios™ PEDOT:PSS to print easily and offered high resolution pattern capability.”

“Printed electronics is a developing capability that will provide new possibilities for device makers like Azoteq,” said Tom Brennan, Product Line Manager, Aerial & Industrial Markets for Kodak. “The superior flexibility and durability of the PEDOT-based films are a great example of how new technology will expand the world of printed electronics.”

Dr Ron Lubianez, Global Sales Manager at Heraeus commented: “optimized Clevios™ highly conductive polymers have permitted new applications in touch technologies that were unthinkable only a few years ago. Now printable and patternable technology is available at an economic price.”

The Azoteq IQS550 will be featured at the Flexible & Printed Electronics Conference and Exhibition (FlexTech Alliance) Phoenix, AZ., January 29 – February 1st (Heraeus Booth #35).

At FlexTech, Dr Lubianez, from Heraeus will also present at the conference, “Conductive Polymer Films and Invisible Patterning Techniques for Transparent Electrode Applications” during which the IQS550 Controller will be demonstrated.

The IQS550 can also be seen at the IPC APEX Expo, February 19-21st in San Diego, CA. (Kodak Booth #3040).

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About Kodak
As the world’s foremost imaging innovator, Kodak helps consumers, businesses, and creative professionals unleash the power of pictures and printing to enrich their lives and businesses. Kodak's Industrial Materials Group offers a portfolio of functional films that enable customers in the electronic, optical and related industrial markets bring tomorrow’s ideas to market today. For more information, visit http://www.kodak.com/go/img.

About Azoteq
Azoteq is the world leader in capacitive proximity solutions for switches, sliders, scroll wheels and touch screens in consumer and industrial applications. Azoteq has design and manufacturing centers in South Africa and China. Azoteq has sales offices and distributors in South Africa, Asia, Europe and the USA. http://www.azoteq.com

About Heraeus
Heraeus, the precious metals and technology group headquartered in Hanau, Germany, is a global, private company with more than 160 years of tradition. Our fields of competence include precious metals, materials, and technologies, sensors, biomaterials, and medical products, as well as dental products, quartz glass, and specialty light sources. With product revenues of €4.8 billion and precious metal trading revenues of €21.3 billion, as well as more than 13,300 employees in over 120 subsidiaries worldwide, Heraeus holds a leading position in its global markets. Visit the Conductive Polymers Division of Heraeus at www.elevios.com

About GSI Technologies
GSI Technologies is a Burr Ridge, Illinois-based specialty contract manufacturer of printed electronics, diagnostic test strips, medical electrodes, smart card displays and electroluminescent lamps. GSI Technologies was founded in 1985 and has decades of experience manufacturing electrodes and related components using roll to roll and automatic sheet fed printing processes. For more information, visit www.gsitech.com.