

News Release

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Merck KGaA, Darmstadt, Germany and CLEARink Displays Sign Development Agreement

- **Cooperation partner is a technology leader in reflective display for mobile devices**
- **Aim to commercialize video-capable, color-reflective displays**

Darmstadt, Germany, January 10, 2017 – Merck KGaA, Darmstadt, Germany, a leading science and technology company, today announced that it has signed a comprehensive materials development agreement with CLEARink Displays, Inc., aiming to bring CLEARink's innovative and patented reflective display technology to market by the end of 2017.

Merck KGaA, Darmstadt, Germany, is a world leader in developing materials and formulations for the LCD and OLED industries. It has also been developing reflective display materials for several years. Merck KGaA's electro-optical inks are designed for electrophoretic displays and specifically support the CLEARink Displays' TIR architecture. CLEARink displays offer unparalleled outdoor readability, full color and video representation, low power consumption and low cost, and are thus well-positioned to create a whole new class of display applications. The first CLEARink displays in kit form will be available in the first half of 2017, with commercial product release expected in early 2018.

"CLEARink is a technology leader in reflective color displays for mobile devices. We are very excited to collaborate with the capable team at CLEARink because its technology allows for fast response and high brightness," said Brian Daniels, Vice President and Head of Business Unit Advanced Technologies at Merck KGaA, Darmstadt, Germany. "This agreement is the culmination of four years of hard work and close cooperation between the two companies."

Initially targeted applications in the mobile device space include smart watches and bands, mobile phones, portable e-Schoolbooks, electronic shelf labels and others. CLEARink has commenced reference design activities with a very select set of leaders in the space.

"We have been working with Merck KGaA, Darmstadt, Germany, since the very

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beginning to develop best-in-class materials for our displays. Today we are within striking distance of our goals to release a much needed product into the market," said Frank Christiaens, CEO of CLEARink Displays. "In the past six months, interest in our technology from customers, investors and partners in the eco-system has been overwhelming." CLEARink Displays will pursue a strategy of selling display modules made by its eco-system partners and will also license its technology for display companies to make their own products.

About CLEARink Displays, Inc.

CLEARink is a leader in reflective display technology for electronic shelf labels (ESLs), wearables, and mobile devices. CLEARink's TIR technology is a superior alternative to existing reflective displays, providing unparalleled video and color representation, using a fraction of the energy consumed by LCD displays, with a highly competitive cost structure, the TIR technology from CLEARink is patent protected. Founded in 2012, the company has raised more than US\$10 million in financing from top-tier venture capital firms and is headquartered in Fremont, California.

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About Merck KGaA, Darmstadt, Germany

Merck KGaA, Darmstadt, Germany, is a leading science and technology company in healthcare, life science and performance materials. Around 50,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2015, Merck KGaA, Darmstadt, Germany, generated sales of € 12.85 billion in 66 countries.

Founded in 1668, Merck KGaA, Darmstadt, Germany, is the world's oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck KGaA, Darmstadt, Germany, holds the global rights to the Merck KGaA, Darmstadt, Germany, name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.