

# High-brightness breakthrough

28 June 2005

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As a result of cooperation between Philips Lighting, Philips Research and Novaled have announced a new record for the efficiency of high-brightness white OLEDs, a new solid state lighting technology. OLEDs are expected to enable people to create their own individual lighting atmosphere with low power consumption.

"It's an encouraging result that clearly demonstrates the potential of OLED technology for lighting applications," said Klaas Vegter, Chief Technology Officer of Philips Lighting's Lamps business group. "We're confident that OLEDs will establish themselves as the second solid state lighting technology in the market."

Unlike normal LEDs, OLEDs incorporate thin layers of organic material that then emit light when electrical power is applied. And in contrast to LEDs, they are large-area sources that emit low-brightness, diffuse light in any color, and can be structured to displays patterns of color or homogeneous white light.

OLEDs are currently mainly applied in small display applications, such as mobile phone, MP3 players or PDAs. But once efficient OLEDs are available at a reasonable cost, they offer the potential to become as, or even more, efficient than energy-saving light bulbs, in a multitude of lighting applications.

Novaled is a German company engaged in the research, development and commercialization of OLED technologies. As Gilda Sorin, its CEO observes, "Power efficiency is one of the crucial properties for light sources. And our proprietary doping technology is the key to increasing that efficiency through lower light sources."

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