Lighting: A whole new dimension of light

Enormous flexibility with minimal space requirements, glare-free light distribution, high efficiency, variable colors: In lighting, printed electronics in the form of organic light-emitting diodes—OLEDs for short—can play to their strengths.

Whether it is inspiring ambient lighting in the car, home lighting with a revolutionary minimalist design or innovative products for light therapy: With **OLED technology**, printed electronics is opening up numerous new approaches and solutions in the field of lighting.

The reason: In contrast to inorganic LEDs, which are point sources, OLEDs are surface luminaires. This means that with OLEDs, possible glare is almost completely eliminated, while at the same time they act as a homogeneous light source—an absolutely unique selling point. This enables completely new designs as well as entirely new products or combination products.

In addition, OLEDs can be seamlessly embedded into individual components or surfaces or allow **homogeneous lighting** even over large areas. Vehicle interiors, for example, can be illuminated more dramatically than ever, while passengers, at the same time, can choose from a wide variety of lighting and color moods. In the living area, luminous wallpapers or ultra-flat, large-area illuminated panels will become available in the future.

With regard to colors, not just classic white but also monochrome OLEDs are possible—for instance configured as taillights in rich red tones, such as those that already mark the rear of more and more vehicles today.

At present, the issues of **manufacturing costs and service life** still pose a certain challenge. Thanks to extensive research and development, it can be assumed that, in the near future, OLEDs will hardly be inferior to competing technologies such as LEDs.