

Title (en)
TRANSPARENT SUPPORTED ELECTRODE FOR AN OLED

Title (de)
GETRÄGERTE TRANSPARENTE ELEKTRODE FÜR EINE OLED

Title (fr)
ELECTRODE SUPPORTEE TRANSPARENTE POUR OLED

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Application
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Abstract (en)
[origin: WO2013117862A1] The present invention relates to a supported electrode for an OLED, including: a transparent or translucent non-conductive substrate (1) having a refractive index of 1.3 to 1.6; a continuous network of metal lines (2) made of a metal or metal alloy having an electrical conductivity at least equal to 5.106 S.m⁻¹ and deposited on at least one surface area of the substrate, the metal lines having an average width L of 0.05 to 3 µm, preferably 0.2 to 2 µm, and in particular 0.3 to 1.5 µm, said metal lines defining a plurality of non-metal domains having a mean equivalent diameter D of 0.1 to 7.0 µm, the ratio D/L being between 0.8 and 5, preferably between 1.2 and 4.5, and in particular between 2 and 3.5, and at least 20% of the surface of the continuous network of metal lines having a tangent forming an angle of 15 to 75° relative to the plane of the substrate and the electrode; and a transparent or translucent layer (3) having a refractive index of 1.6 to 2.4 and a resistivity greater than that of the continuous network of metal lines and less than 104 Ω.cm, said layer completely covering the network of metal lines and the non-metallized domains, the continuous network of metal lines (2) and the transparent or translucent layer together forming a composite layer referred to as an electrode layer.

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