

Title (en)

SUPPORT FOR ORGANIC-LIGHT-EMITTING-DIODE DEVICE, SUCH AN ORGANIC-LIGHT-EMITTING-DIODE DEVICE AND PROCESS FOR MANUFACTURING SAID DEVICE

Title (de)

TRÄGER FÜR EIN OLED-BAUELEMENT, DERARTIGES OLED-BAUELEMENT UND VERFAHREN ZUR HERSTELLUNG DIESES BAUELEMENTS

Title (fr)

SUPPORT DE DISPOSITIF A DIODE ELECTROLUMINESCENTE ORGANIQUE, UN TEL DISPOSITIF A DIODE ELECTROLUMINESCENTE ORGANIQUE ET SON PROCEDE DE FABRICATION

Publication

EP 2612379 A1 20130710 (FR)

Application

EP 11761675 A 20110829

Priority

- FR 1056861 A 20100830
- FR 2011051972 W 20110829

Abstract (en)

[origin: WO2012028809A1] The invention relates to a support (10) for an organic-light-emitting-diode device (1000) comprising a transparent substrate (1) of given first optical refractive index n₁, comprising: a dielectric grating (3) in the form of one or more layers arranged discontinuously so as to form an array of what are called low-index patterns (30), the grating having a second optical refractive index n₂ of 1.6 or less, the low-index patterns being submicron-sized in height, the average pattern width A₁ being 6 μm or less and the distance B₁ between micron-sized patterns being larger than the width A₁; and a first electrode (4), with a given third optical refractive index n₃ of 1.7 or more. The distance B₁ is aperiodic. At least some of the thickness of the first electrode (4) is above said grating (3) and makes contact with the surface of the grating (3) which is furthest from that substrate (1), or is spaced apart from the grating (3) of low-index patterns. The grating (3) is buried in a high-index medium (100) and is therefore inside the high-index medium, the high-index medium comprising the first electrode (4) in the form of the one or more layers furthest from the substrate, the high-index medium having a fourth refractive index n₄ of 1.7 or more. The invention also relates to the process for manufacturing such a support.

IPC 8 full level

H01L 51/52 (2006.01); **C03C 17/00** (2006.01)

CPC (source: EP KR)

C03C 17/42 (2013.01 - EP KR); **H05B 33/02** (2013.01 - EP KR); **H05B 33/10** (2013.01 - EP KR); **H10K 50/125** (2023.02 - KR); **H10K 50/858** (2023.02 - EP KR); H10K 50/125 (2023.02 - EP); **H10K 50/816** (2023.02 - EP KR); **H10K 71/00** (2023.02 - EP KR); H10K 2102/301 (2023.02 - KR); **H10K 2102/302** (2023.02 - KR)

Citation (search report)

See references of WO 2012028809A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

FR 2964254 A1 20120302; FR 2964254 B1 20130614; CN 103190012 A 20130703; EP 2612379 A1 20130710; JP 2013536977 A 20130926; KR 20130106832 A 20130930; WO 2012028809 A1 20120308

DOCDB simple family (application)

FR 1056861 A 20100830; CN 201180051794 A 20110829; EP 11761675 A 20110829; FR 2011051972 W 20110829; JP 2013526529 A 20110829; KR 20137008184 A 20110829