

Title (en)
OPTOELECTRONIC DEVICE COMPRISING TWO WIRE-SHAPED LIGHT-EMITTING DIODES EACH HAVING A LAYER THAT LIMITS THE LEAKAGE CURRENTS

Title (de)
OPTOELEKTRONISCHE VORRICHTUNG MIT ZWEI DRAHTFÖRMIGEN LEUCHTDIODEN MIT JEWEILS EINER LECKSTROMBEGRENZUNGSSCHICHT

Title (fr)
DISPOSITIF OPTOÉLECTRONIQUE COMPORTANT DEUX DIODES ÉLECTROLUMINESCENTES FILAIRES AYANT CHACUNE UNE COUCHE LIMITANT LES COURANTS DE FUITE

Publication
EP 3977512 A1 20220406 (FR)

Application
EP 20737521 A 20200528

Priority
• FR 1905638 A 20190528
• FR 2020050902 W 20200528

Abstract (en)
[origin: WO2020240140A1] The invention relates to an optoelectronic device (10) comprising first and second light-emitting diodes (11), each LED (11) comprising: a first semiconductor portion (112), with a first type of doping, having a wire-like shape along an axis (11b) and having side surfaces (112b) parallel to this axis; an active portion (111) arranged at least partially on a top end (11a) of the first portion (112); a second semiconductor portion (113), with a second type of doping, arranged at least partially on all or part of the active portion (111); an electrically resistive layer (114) having an electrical resistance that is higher than that of the active portion (111), covering at least all or part of the side surfaces (112b) of the first portion (112) and all or part of the surface of the top end (11a) of the first portion (112) not covered by the active portion (111). The resistive layers (114) of the first and second LEDs are separated from one another.

IPC 8 full level
H01L 27/15 (2006.01); **H01L 33/08** (2010.01); **H01L 33/14** (2010.01); **H01L 33/18** (2010.01); **H01L 33/24** (2010.01); **H01L 33/32** (2010.01); **H01L 33/44** (2010.01)

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Citation (search report)
See references of WO 2020240140A1

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