

Title (en)

USE OF PHENOTHIAZINE-S-OXIDES AND PHENOTHIAZINE -S,S-DIOXIDES IN THE FORM OF MATRIX MATERIALS FOR ORGANIC LIGHT-EMITTING DIODES

Title (de)

VERWENDUNG VON PHENOTHIAZIN-S-OXIDEN UND -S,S-DIOXIDEN ALS MATRIXMATERIALIEN FÜR ORGANISCHE LEUCHTDIODEN

Title (fr)

UTILISATION DE PHENOTHIAZIN-S-OXYDES ET DE PHENOTHIAZINE-S,S-DIOXYDES EN TANT QUE MATERES MATRICIELLES POUR DIODES LUMINESCENTES ORGANIQUES

Publication

**EP 1817805 A1 20070815 (DE)**

Application

**EP 05808298 A 20051123**

Priority

- EP 2005012527 W 20051123
- DE 102004057073 A 20041125

Abstract (en)

[origin: WO2006056416A1] The invention relates to the use of phenothiazine-S-oxides and phenothiazine-S,S dioxides in the form of matrix materials for organic light-emitting diodes, in particular in the form of matrix materials in the light-emitting layer of the organic light-emitting diodes. The organic light-emitting diodes comprising the organic layer which contains at least one type of phenothiazine-S-oxide or phenothiazine-S,S dioxide in the form of matrix materials and at least one another substance distributed therein in the form of an emitter, the light-emitting layers consisting of one or several types of phenothiazine-S-oxides or phenothiazine-S,S dioxides in the form of the matrix material and at least another substance distributed therein in the form of the emitter, the organic light-emitting diodes comprising corresponding light-emitting layers and devices provided with corresponding organic light emitting diodes are also disclosed.

IPC 8 full level

**H01L 51/30** (2006.01)

CPC (source: EP KR US)

**H10K 10/00** (2023.02 - KR); **H10K 85/631** (2023.02 - EP US); **H10K 85/6572** (2023.02 - EP US); **H10K 50/11** (2023.02 - EP US);  
**H10K 85/342** (2023.02 - EP US); **H10K 2102/103** (2023.02 - EP US)

Citation (search report)

See references of WO 2006056416A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006056416 A1 20060601**; CN 101065857 A 20071031; DE 102004057073 A1 20060608; EP 1817805 A1 20070815;  
JP 2008522389 A 20080626; KR 20070090214 A 20070905; US 2008018238 A1 20080124

DOCDB simple family (application)

**EP 2005012527 W 20051123**; CN 200580040544 A 20051123; DE 102004057073 A 20041125; EP 05808298 A 20051123;  
JP 2007541830 A 20051123; KR 20077014497 A 20070625; US 72015605 A 20051123