

Title (en)

AN ORGANIC LIGHT EMITTING DEVICE CONTAINING A PROTECTION LAYER

Title (de)

ORGANISCHES LICHEMITTIERENDES BAUELEMENT MIT EINER SCHUTZSCHICHT

Title (fr)

DISPOSITIF ORGANIQUE LUMINESCENT CONTENANT UNE COUCHE DE PROTECTION

Publication

EP 0950254 A1 19991020 (EN)

Application

EP 97953470 A 19971223

Priority

- US 9723952 W 19971223
- US 77411996 A 19961223
- US 77412096 A 19961223
- US 77233296 A 19961223
- US 77181596 A 19961223
- US 81497697 A 19970311
- US 82138097 A 19970320
- US 83809997 A 19970415
- US 85026497 A 19970502
- US 86549197 A 19970529
- US 92540397 A 19970909
- US 92880097 A 19970912

Abstract (en)

[origin: WO9828767A1] The present invention is directed to organic light emitting devices comprised of a heterostructure for producing electroluminescence, wherein the heterostructure includes a protection layer between a hole transporting layer and an indium tin oxide anode layer. The hole injection enhancement layer may be comprised of 3,4,9,10-perylenetetracarboxylic dianhydride (PTCDA), bis(1,2,5-thiadiazolo)-p-quinobis(1,3-dithiole) (BTQBT), or other suitable, rigid organic materials. The present invention is further directed to methods of fabricating such devices, wherein the devices may include alternative combinations of materials for each of the layers included in the devices.

IPC 1-7

H01J 1/63; H05B 33/14

IPC 8 full level

C09K 11/06 (2006.01); **H01L 51/30** (2006.01); **H01L 51/50** (2006.01); **H01L 51/52** (2006.01); **H05B 33/02** (2006.01); **H05B 33/10** (2006.01); **H05B 33/12** (2006.01); **H01L 27/32** (2006.01); **H01L 51/00** (2006.01)

CPC (source: EP)

B82Y 10/00 (2013.01); **H10K 50/17** (2023.02); **H10K 59/878** (2023.02); **H10K 71/60** (2023.02); **H10K 85/324** (2023.02); **H10K 85/326** (2023.02); **H10K 85/621** (2023.02); **H10K 59/32** (2023.02); **H10K 59/8051** (2023.02); **H10K 59/876** (2023.02); **H10K 59/8792** (2023.02); **H10K 85/211** (2023.02); **H10K 2102/103** (2023.02); **H10K 2102/3026** (2023.02)

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9828767 A1 19980702; CA 2275542 A1 19980702; CN 1245581 A 20000223; EP 0950254 A1 19991020; EP 0950254 A4 20021127; JP 2001527688 A 20011225

DOCDB simple family (application)

US 9723952 W 19971223; CA 2275542 A 19971223; CN 97181500 A 19971223; EP 97953470 A 19971223; JP 52908098 A 19971223