

Title (en)
OLED ELECTRON-INJECTING LAYER

Title (de)
OLED-ELEKTRONENINJEKTIONSSCHICHT

Title (fr)
COUCHE D'INJECTION D'ELECTRONS D'UNE OLED

Publication
EP 2016633 A1 20090121 (EN)

Application
EP 06759222 A 20060508

Priority
US 2006017555 W 20060508

Abstract (en)
[origin: WO2007130047A1] An OLED includes an anode (120) , a light emitting layer (150) disposed over the anode (120), and a first electron injecting layer disposed over the light- emitting layer, wherein the first electron- injecting layer (271) includes at least one organic host material having a reduction potential less than -1.0 V vs. a Saturated Calomel Electrode and at least one dopant material capable of reducing the organic host material. The OLED also includes a second electron-injecting layer (272) disposed in contact with the first electron- injecting layer (271) , wherein the second electron- injecting layer (272) includes at least one organic material having a reduction potential greater than -1.0 V vs . a Saturated Calomel Electrode, and a cathode (180) disposed over the second electron- injecting layer (272) .

IPC 8 full level
H01L 51/50 (2006.01)

CPC (source: EP US)
H10K 50/165 (2023.02 - EP US); **H10K 50/171** (2023.02 - EP US); **H10K 85/324** (2023.02 - EP); **H10K 85/621** (2023.02 - EP); **H10K 85/6574** (2023.02 - EP); **H10K 2101/50** (2023.02 - EP); **H10K 2102/103** (2023.02 - EP)

Citation (search report)
See references of WO 2007130047A1

Designated contracting state (EPC)
DE FR GB

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
WO 2007130047 A1 20071115; EP 2016633 A1 20090121; EP 2355198 A1 20110810; EP 2355198 B1 20150909

DOCDB simple family (application)
US 2006017555 W 20060508; EP 06759222 A 20060508; EP 11003715 A 20060508