

Title (en)
ORGANIC ELECTRONIC CIRCUIT

Title (de)
ORGANISCH ELEKTRONISCHE SCHALTUNG

Title (fr)
CIRCUIT ÉLECTRONIQUE ORGANIQUE

Publication
EP 2377157 A1 20111019 (DE)

Application
EP 09805681 A 20091214

Priority

- EP 2009008939 W 20091214
- DE 102008061928 A 20081215

Abstract (en)
[origin: WO2010075953A1] The invention relates to an organic electronic circuit (1, 2, 3) comprising a main substrate (80, 80a, 80b) and an organic electronic component (10, 11, 12) in the form of a multilayer film. The multilayer film comprises one or more electrically conductive functional layers (101, 105) and one or more electrically semiconductive functional layers (103). In a first area (90) of the organic electronic circuit (1, 2, 3), one of the one or more electrically conductive functional layers (101, 105) of the organic electronic component (10, 11, 12) is formed as an electrode layer of the electronic component (10, 11, 12). In said one of the one or more electrically conductive functional layers, one or more electrodes for one or more organic field effect transistors or organic diodes are formed. Said one of the one or more electrically conductive functional layers is further formed in the form of a first capacitor plate (201). Said one of the one or more electrically conductive functional layers thus forms an integral part of the organic electronics component (10, 11, 12). In a second area (91) of the organic electronic circuit (1, 2, 3), one of the one or more electrically conductive functional layers (101, 105) of the organic electronic component (10, 11, 12) is formed as an electrode layer of the electronic component (10, 11, 12). In said one of the one or more electrically conductive functional layers, one or more electrodes for one or more organic field effect transistors or organic diodes are formed. Said one of the one or more electrically conductive functional layers is further formed in the form of a second capacitor plate (211). Said one of the one or more electrically conductive functional layers thus forms an integrated part of the organic electronics component (10, 11, 12). The electronic circuit (10, 11, 12) and the main substrate (80, 80a, 80b) are laminated together. The main substrate (80, 80a, 80b) comprises an electrically conductive layer. The electrically conductive layer is formed in the form of a third capacitor plate (50). The third capacitor plate (50) is formed and the electronic component (10, 11, 12) and the main substrate (80, 80a, 80b) are laminated to each other such that the third capacitor plate (50) at least partially overlaps each of the first capacitor plate (201) and the second capacitor plate (211). The first capacitor plate (201), the second capacitor plate (211), and the third capacitor plate (50) form a capacitor of the organic electronic circuit (1, 2, 3).

IPC 8 full level
H01L 27/32 (2006.01); **H01L 51/05** (2006.01); **H01L 51/52** (2006.01)

CPC (source: EP KR US)
H10K 10/462 (2023.02 - KR); **H10K 19/00** (2023.02 - EP KR); **H10K 50/30** (2023.02 - KR); **H10K 59/1216** (2023.02 - EP KR US); **H10K 10/462** (2023.02 - EP US); **H10K 10/82** (2023.02 - US); **H10K 2102/302** (2023.02 - KR)

Citation (search report)
See references of WO 2010075953A1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
DE 102008061928 A1 20100617; CN 102318069 A 20120111; CN 102318069 B 20140514; EP 2377157 A1 20111019; KR 20110099696 A 20110908; TW 201030963 A 20100816; US 2011253989 A1 20111020; WO 2010075953 A1 20100708; WO 2010075953 A8 20100910

DOCDB simple family (application)
DE 102008061928 A 20081215; CN 200980156586 A 20091214; EP 09805681 A 20091214; EP 2009008939 W 20091214; KR 20117013639 A 20091214; TW 98143055 A 20091215; US 200913139564 A 20091214