

Title (en)

ORGANIC DIODES WITH SWITCHABLE PHOTSENSITIVITY

Title (de)

ORGANISCHE DIODEN MIT SCHALTBARER PHOTOEMPFLINDLICHKEIT

Title (fr)

DIODES ORGANIQUES A PHOTSENSIBILITE COMMUTABLE

Publication

EP 1027741 A1 20000816 (EN)

Application

EP 98939408 A 19980814

Priority

- US 9816935 W 19980814
- US 5584097 P 19970815

Abstract (en)

[origin: WO9909603A1] Organic diode detectors (10) with switchable photosensitivity are achieved using organic photo layers (12) in the photodiodes and a detector circuit (15, 16) which applies a reverse or forward bias voltage across the diodes. These diodes can be arranged in matrices which function as high-performance, two-dimensional image sensors. These image sensors can achieve full color or selected color detection capability.

IPC 1-7

H01L 27/00; H01L 51/20; H01L 27/146

IPC 8 full level

G01T 1/20 (2006.01); **G01T 1/29** (2006.01); **G01T 1/36** (2006.01); **H01L 27/146** (2006.01); **H01L 31/10** (2006.01); **H10K 99/00** (2023.01)

CPC (source: EP)

B82Y 10/00 (2013.01); **H01L 27/14643** (2013.01); **H10K 10/50** (2023.02); **H10K 30/20** (2023.02); **H10K 30/30** (2023.02); **H10K 30/451** (2023.02); **H10K 39/32** (2023.02); **H10K 85/113** (2023.02); **H10K 85/114** (2023.02); **H10K 85/115** (2023.02); **H10K 85/143** (2023.02); **H10K 85/146** (2023.02); **H10K 85/211** (2023.02); **H10K 85/631** (2023.02); **Y02E 10/549** (2013.01)

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

WO 9909603 A1 19990225; **WO 9909603 A9 19990514**; AU 8783998 A 19990308; CN 1143400 C 20040324; CN 1270706 A 20001018; EP 1027741 A1 20000816; EP 1027741 A4 20051012; HK 1030482 A1 20010504; JP 2001516150 A 20010925

DOCDB simple family (application)

US 9816935 W 19980814; AU 8783998 A 19980814; CN 98809103 A 19980814; EP 98939408 A 19980814; HK 01101312 A 20010223; JP 2000510172 A 19980814