

Title (en)
RADIATION SENSORS

Title (de)
STRAHLUNGSSENSOREN

Title (fr)
CAPTEURS DE RAYONNEMENT

Publication
EP 0914682 A2 19990512 (EN)

Application
EP 97933750 A 19970722

Priority
• GB 9701972 W 19970722
• GB 9615605 A 19960725

Abstract (en)
[origin: WO9805072A2] A radiation sensor comprising a field effect transistor (1) is disclosed. The transistor (1) comprises a substrate (2) and a doped gate layer (3) on the substrate (2). An insulating layer (4) is provided on the gate layer (3), and interdigitated source (5) and drain (6) regions are provided on the insulating layer (4). An active layer (7) including at least one organic semiconductor material is arranged between the source and drain regions. Ionising radiation incident on the detector causes changes in the electrical properties of the detector, and the electrical properties provide an indication of the integrated radiation dose incident upon the detector.

IPC 1-7
H01L 51/20; **G01T 1/10**

IPC 8 full level
G01J 1/02 (2006.01); **G01T 1/24** (2006.01); **H01L 27/14** (2006.01); **H01L 29/786** (2006.01); **H10K 99/00** (2023.01)

CPC (source: EP)
H10K 10/466 (2023.02); **H10K 30/65** (2023.02); **H10K 10/88** (2023.02); **H10K 85/114** (2023.02); **Y02E 10/549** (2013.01)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 9805072 A2 19980205; **WO 9805072 A3 19980522**; AU 3699697 A 19980220; EP 0914682 A2 19990512; GB 9615605 D0 19960904; JP 2000516395 A 20001205

DOCDB simple family (application)
GB 9701972 W 19970722; AU 3699697 A 19970722; EP 97933750 A 19970722; GB 9615605 A 19960725; JP 50859098 A 19970722