

Title (en)

DEPFET TRANSISTOR HAVING A LARGE DYNAMIC RANGE

Title (de)

DEPFET-TRANSISTOR MIT GROSSEM DYNAMIKBEREICH

Title (fr)

TRANSISTOR DEPFET PRÉSENTANT UNE PLAGE DYNAMIQUE ÉTENDUE

Publication

**EP 2195861 A1 20100616 (DE)**

Application

**EP 08840113 A 20081008**

Priority

- EP 2008008489 W 20081008
- DE 102007048890 A 20071011

Abstract (en)

[origin: WO2009049808A1] The invention relates to a DEPFET transistor (1) for detecting a radio-generated signal charge (2) and for generating an electronic output signal in a manner dependent on the detected signal charge (2) according to a predetermined characteristic curve. The invention provides for the characteristic curve to have a degressive characteristic curve profile in order to combine a high measurement sensitivity in the case of small signal charges (2) with a large measurement range through to large signal charges (2).

IPC 8 full level

**H01L 31/119** (2006.01); **H01L 31/0352** (2006.01)

CPC (source: EP US)

**H01L 27/14679** (2013.01 - EP US); **H01L 31/035272** (2013.01 - EP US); **H01L 31/119** (2013.01 - EP US)

Citation (search report)

See references of WO 2009049808A1

Citation (examination)

- US 6255680 B1 20010703 - NAKASHIBA YASUTAKA [JP]
- DE 102005025641 A1 20061207 - MAX PLANCK GESELLSCHAFT [DE], et al

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**DE 102007048890 B3 20090319**; EP 2195861 A1 20100616; US 2010237392 A1 20100923; US 8461635 B2 20130611;  
WO 2009049808 A1 20090423

DOCDB simple family (application)

**DE 102007048890 A 20071011**; EP 08840113 A 20081008; EP 2008008489 W 20081008; US 68261108 A 20081008