

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)

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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