

Title (en)

FIELD EFFECT TRANSISTOR WITH INTEGRATED TJBS DIODE

Title (de)

FELDEFFEKTTRANSISTOR MIT INTEGRIERTER TJBS-DIODE

Title (fr)

TRANSISTOR À EFFET DE CHAMP À DIODE TJBS INTÉGRÉE

Publication

**EP 2462618 A1 20120613 (DE)**

Application

**EP 10721527 A 20100610**

Priority

- DE 102009028240 A 20090805
- EP 2010058166 W 20100610

Abstract (en)

[origin: WO2011015397A1] A semiconductor component comprising at least one MOS field effect transistor and one diode is specified, wherein the diode is a trench junction barrier Schottky diode (TJBS) and the arrangement comprising MOS field effect transistor and trench junction barrier Schottky diode (TJBS) is configured as a monolithically integrated structure. The breakdown voltages of the MOS field effect transistor and of the trench junction barrier Schottky diode (TJBS) are in this case chosen in such a way that the MOS field effect transistor can be operated at breakdown.

IPC 8 full level

**H01L 29/78** (2006.01)

CPC (source: EP US)

**H01L 29/7806** (2013.01 - EP US); **H01L 29/7813** (2013.01 - EP US); **H01L 29/872** (2013.01 - EP US); **H01L 29/8725** (2013.01 - EP US); **H01L 21/223** (2013.01 - EP US); **H01L 29/04** (2013.01 - EP US); **H01L 29/0619** (2013.01 - EP US); **H01L 29/1095** (2013.01 - EP US); **H01L 29/41766** (2013.01 - EP US); **H01L 29/66734** (2013.01 - EP US)

Citation (search report)

See references of WO 2011015397A1

Citation (examination)

US 6049108 A 20000411 - WILLIAMS RICHARD K [US], et al

Designated contracting state (EPC)

AL 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)

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