

Title (en)

DRAIN-EXTENDED MOSFETS WITH DIODE CLAMP

Title (de)

DRAIN-ERWEITERTE MOSFETS MIT DIODENKLEMMUNG

Title (fr)

TRANSISTORS MOS A DRAIN ETENDU DOTES D'UNE FIXATION DE DIODE

Publication

**EP 1908121 A4 20090930 (EN)**

Application

**EP 05772304 A 20050718**

Priority

US 2005025396 W 20050718

Abstract (en)

[origin: WO2007011354A1] High side extended-drain MOS driver transistors (T2) are presented in which an extended drain (108, 156) is separated from a first buried layer (120) by a second buried layer (130), wherein an internal or external diode (148) is coupled between the first buried layer (120) and the extended drain (108, 156) to increase the breakdown voltage.

IPC 8 full level

**H01L 29/94** (2006.01)

CPC (source: EP KR)

**H01L 29/1083** (2013.01 - EP); **H01L 29/66689** (2013.01 - EP); **H01L 29/7818** (2013.01 - EP); **H01L 29/94** (2013.01 - KR);  
**H01L 29/42368** (2013.01 - EP)

Citation (search report)

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- [A] US 2003173624 A1 20030918 - CHOI YONG-CHEOL [KR], et al
- [A] PARTHASARATHY V ET AL: "Drain profile engineering of resurf LDMOS devices for ESD ruggedness", PROCEEDINGS OF THE 14TH. INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & ICS. ISPSD'02. SANTA FE, NM, JUNE 4 - 7, 2002; [INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES & IC'S], NEW YORK, NY : IEEE, US, 4 June 2002 (2002-06-04), pages 265 - 268, XP010591617, ISBN: 978-0-7803-7318-1
- See references of WO 2007011354A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

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KR 100985373 B1 20101004; KR 20080033423 A 20080416

DOCDB simple family (application)

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