

Title (en)
SEMICONDUCTOR COMPONENT

Title (de)
HALBLEITERBAUELEMENT

Title (fr)
COMPOSANT SEMI-CONDUCTEUR

Publication
EP 1029362 A1 20000823 (DE)

Application
EP 98948800 A 19980817

Priority
• DE 9802373 W 19980817
• DE 19748523 A 19971103

Abstract (en)
[origin: DE19748523A1] The invention relates to a semiconductor component, comprising a semiconductor body (1) with two main surfaces, at least two electrodes (D, S), one of which is provided on a main surface, and alternating zones (3; 5, 7) of opposing conductor types which are situated in the semiconductor body (1) and which extend perpendicularly to the two main surfaces. When a voltage is applied to the two electrodes (D, S), the alternating zones (3; 5, 7) mutually discharge their charge carriers so that an essentially constant field strength is established in the semiconductor body (1) between the two electrodes. According to the invention, the alternating zones (3; 5, 7) contain at least one hollow space (6) which is preferably sealed by a glass layer (10).

IPC 1-7
H01L 29/78; **H01L 29/417**; **H01L 29/06**; **H01L 29/861**; **H01L 29/92**; **H01L 21/336**

IPC 8 full level
H01L 21/336 (2006.01); **H01L 21/76** (2006.01); **H01L 29/06** (2006.01); **H01L 29/47** (2006.01); **H01L 29/78** (2006.01); **H01L 29/861** (2006.01); **H01L 29/872** (2006.01); **H01L 29/93** (2006.01)

CPC (source: EP US)
H01L 29/0619 (2013.01 - EP); **H01L 29/0634** (2013.01 - EP); **H01L 29/7802** (2013.01 - EP US); **H01L 29/41766** (2013.01 - EP)

Citation (search report)
See references of WO 9923704A1

Designated contracting state (EPC)
DE FR GB IE IT

DOCDB simple family (publication)
DE 19748523 A1 19990512; **DE 19748523 C2 19991007**; EP 1029362 A1 20000823; JP 2001522146 A 20011113; JP 3348090 B2 20021120; WO 9923704 A1 19990514

DOCDB simple family (application)
DE 19748523 A 19971103; DE 9802373 W 19980817; EP 98948800 A 19980817; JP 2000519470 A 19980817