

Title (en)  
TRANSISTOR CELL HAVING AN IMPLANTED EXPANSION REGION

Title (de)  
TRANSISTORZELLE MIT IMPLANTIERTEM AUFWEITUNGSGBIET

Title (fr)  
CELLULE DE TRANSISTOR COMPRENANT UNE ZONE D'ÉLARGISSEMENT IMPLANTÉE

Publication  
**EP 3977515 A1 20220406 (DE)**

Application  
**EP 20728423 A 20200518**

Priority

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Abstract (en)  
[origin: WO2020239488A1] The invention relates to a transistor cell (100), comprising a semiconductor substrate (101), which has a front side and a rear side, wherein: the front side is opposite the rear side; an epitaxial layer (102) is arranged on the front side; channel regions (103) are arranged on the epitaxial layer (102) and source regions (104) are arranged on the channel regions (103); a trench (105) and field shielding regions (108) extend from the front side of the semiconductor substrate (101) into the epitaxial layer (102); the field shielding regions (108) are each arranged at a lateral distance from the trench (105), and the trench (105) has a smaller depth than the field shielding regions (108), characterized in that an implanted expansion region (112) having a certain thickness is arranged below the trench (105).

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Citation (search report)  
See references of WO 2020239488A1

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DOCDB simple family (publication)  
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