

Title (en)  
MOS POWER TRANSISTOR.

Title (de)  
MOS-LEISTUNGSTRANSISTOR.

Title (fr)  
TRANSISTOR DE PUISSANCE MOS.

Publication  
**EP 0077337 A1 19830427 (EN)**

Application  
**EP 82901076 A 19820222**

Priority  
US 23732381 A 19810223

Abstract (en)  
[origin: WO8202981A1] MOS power transistor (10) having high breakdown voltage and reduced on-state resistance. The transistor (10) is of the diffused channel type having source (32) and gate (28) electrodes on a first surface (24) and drain electrode (34) on a second surface. High breakdown voltage is achieved by fabricating the device in a high resistivity epitaxial layer (14) having a doping level consistent with the designed breakdown voltage requirement. Reduced on-state resistance is achieved by locally reducing the resistivity of the epitaxial layer (14) in surface regions (44) positioned between two adjacent source regions (20).

Abstract (fr)  
Transistor de puissance MOS (10) ayant une tension de rupture elevee et une resistance reduite a l'etat de conduction. Le transistor (10) est du type a canal diffuse ayant des electrodes de source (32) et de porte (28) sur une premiere surface (24) et une electrode de drain (34) sur une seconde surface. On obtient une tension de rupture elevee en fabriquant le dispositif dans une couche epitaxiale de resistivite elevee (14) ayant un niveau de dopage correspondant a la tension de rupture requise. La resistance reduite a l'etat de conduction est obtenue en reduisant localement la resistivite de la couche epitaxiale (14) dans des regions superficielles (44) placees entre deux regions de source adjacentes (20).

IPC 1-7  
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IPC 8 full level  
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