

Title (en)

FIELD-EFFECT-CONTROLLED SEMICONDUCTOR COMPONENT.

Title (de)

FELDEFFEKTGESTEUERTES HALBLEITERBAUELEMENT.

Title (fr)

COMPOSANT A SEMICONDUCTEUR A COMMANDE PAR EFFET DE CHAMP.

Publication

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Application

EP 93919100 A 19930819

Priority

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- EP 9302216 W 19930819

Abstract (en)

[origin: DE4228832A1] The invention concerns a field-effect-controlled semiconductor component with at least four zones of alternating opposite conduction types, an emitter region at the anode end, a first and a second base region adjacent to the emitter region, an emitter region at the cathode end and an additional adjacent emitter region, plus an anode contact, a contact with the emitter region at the cathode end and a MOS field-effect transistor control-electrode contact. The cathode-end emitter region and the adjacent emitter region form the source and drain of a MOS field-effect transistor. The part (34, 36) of the cathode-end base region which is adjacent to the emitter region (44) of a main thyristor, or a separate highly p-doped region (38) adjacent to the cathode-end base region, is connected to the cathode contact (72) by an integrated component (D) with a non-linear current/voltage characteristic.

IPC 1-7

H01L 29/74

IPC 8 full level

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