

Title (en)

FIELD-EFFECT DEVICE HAVING A METAL-INSULATOR-SEMICONDUCTOR HIGH-VOLTAGE STRUCTURE AND METHOD OF MAKING THE SAME

Title (de)

FELDEFFEKTBAUELEMENT MIT METALL-ISOLATOR-HALBLEITER-HOCHSPANNUNGS-STRUKTUR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

STRUCTURE DE DISPOSITIF HAUTE TENSION MOS A MOTIF ELEMENTAIRE EFFILE

Publication

EP 1735839 A2 20061227 (EN)

Application

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Abstract (en)

[origin: WO2005091371A2] A field effect electronic device (e.g., an FET) includes a field plate disposed over a dielectric layer, which is disposed over a semiconductor layer, wherein a drift region of the device is in the semiconductor layer. A doping level varies substantially non-linearly across the drift region, and the device exhibits a substantially constant reduced surface electric field. A method of fabricating a field effect device includes providing a non-linear non-uniform doping density in a drift region of a semiconductor layer of the device wherein both the semiconductor layer and the dielectric layer have non-constant thickness.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2005091371A2

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