

Title (en)
INSULATED GATE FIELD EFFECT TRANSISTOR

Publication
EP 0000883 B1 19800528 (DE)

Application
EP 78100594 A 19780804

Priority
US 82939377 A 19770831

Abstract (en)
[origin: EP0000883A1] 1. Insulation layer field effect transistor with a channel region (16) of a second conductivity type formed between source (4) and drain (6) of a first conductivity type, in a substrate (2) of the second conductivity type and an insulated gate electrode over the channel region, characterised in that a buried insulation layer (10) is provided in the substrate (2) under the channel region (16) between source (4) and drain (6) which extends into the substrate (2) the effective transistor depletion zone appearing in connection with the channel region (16), which layer (10) can be completely depleted by the application of a critical substrate-source bias V_{xsc} , whereby the distance between the electrostatic charges on the gate electrode and the charges induced by them in the substrate (2) is increased to such an extent that the sensitivity of the threshold voltage V_T relative to the changes of the substrate-source bias V_{xs} is reduced.

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IPC 8 full level
H01L 29/78 (2006.01)

CPC (source: EP)
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DE FR GB

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