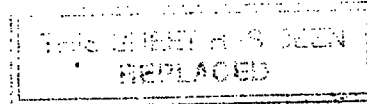


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- 25 -

JUNCTION FIELD EFFECT TRANSISTOR AND
METHOD OF PRODUCING THE SAME

ABSTRACT OF THE DISCLOSURE

For suppressing generation of leakage current and side-gate effect in a junction field effect transistor, a gate extension is formed on a semi-insulative compound semiconductor substrate in a manner to extend from a gate and to protrude outward beyond a channel transversely thereto, and an insulating layer is formed on the semi-insulative compound semiconductor substrate under the gate extension. A method of producing this transistor comprises the steps of first forming a channel and a source-drain on a substrate, then forming a gate on the channel together with a gate extension which extends from the gate and protrudes outward beyond the channel transversely thereto, and forming an insulating layer adjacently to the channel and the source-drain in such a manner that no gap is existent between the insulating layer and at least the channel.