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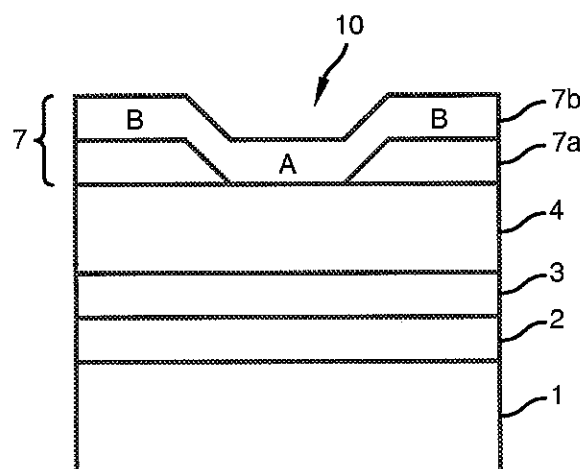
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(54) Title: ELECTRONIC DEVICE WITH CONTROLLED ELECTRICAL FIELD

**FIG. 5A**



(57) Abstract: The present invention relates to an electronic device comprising materials of the group III/N, successively comprising from its base towards its surface: - a support substrate (1) - a layer (2, 3) adapted to contain an electron gas - a barrier layer (4) - a superficial layer (7) extending on at least one part of the surface of the barrier layer (4), characterised in that the superficial layer (7) has an electrical field of which the current is controlled so that, in at least one first region (A) of the superficial layer, the electrical field is weaker than in a second region (B) of the superficial layer. The invention also relates to a manufacturing method for such an electronic device.