

Title (en)
SEMICONDUCTOR DEVICE AND METHOD FOR PRODUCING THE SAME

Title (de)
HALBLEITEREINRICHTUNG UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
DISPOSITIF A SEMI-CONDUCTEUR ET SON PROCEDE DE PRODUCTION

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Application
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Abstract (en)
[origin: WO0237576A2] The invention relates to a semi-conductor device having a layered structure consisting of a carrier layer (2) which comprises an electrically conductive carrier material; an insulation layer (4) which is formed by electrically insulating insulation material, is arranged on the carrier layer (2) and contains semiconductor particles; and a covering layer (6) which comprises at least one electrically conductive cover material and is arranged on the insulating layer (4). Each semiconductor particle (1) touches both the carrier layer (2) and the covering layer (6) and forms at least one p-n-junction (3, 5). The insulating material consists of at least one metal oxide compound which at least partially contains an oxide of the carrier material. The invention also relates to methods for producing the inventive semiconductor device.

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