

Title (en)  
METHOD FOR PRODUCING A BIPOLAR TRANSISTOR COMPRISING A POLYSILICON EMITTER

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES BIPOLARTRANSISTORS MIT POLYSILIZIUMEMITTER

Title (fr)  
PROCEDE DE PRODUCTION D'UN TRANSISTOR BIPOLAIRE DOTE D'UN EMETTEUR POLYSILICIUM

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Application  
**EP 02753085 A 20020710**

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Abstract (en)  
[origin: WO03007361A2] The invention relates to a method for producing a bipolar transistor comprising a polysilicon emitter, according to which a collector region of a first conductivity type and an adjacent base region of a second conductivity type are created. At least one layer consisting of an insulating material is then applied, said layer or layers being structured in such a way that at least one section of the base region is exposed. A layer consisting of a polycrystalline semiconductor material of the first conductivity type, which is highly doped with doping atoms, is subsequently created, in such a way that the exposed section is essentially covered. A second layer consisting of a highly conductive material is then created on the layer consisting of the polycrystalline semiconductor material, forming a dual-layer emitter with the latter. At least one portion of the doping atoms of the first conductivity type of the highly doped polycrystalline semiconductor layer is then caused to diffuse into the base region, to create an emitter region of the first conductivity type.

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**H01L 29/66272** (2013.01 - EP US); **H01L 29/73** (2013.01 - KR); **H01L 21/2257** (2013.01 - EP US)

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See references of WO 03007361A2

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