

Title (en)

GaP-SEMICONDUCTOR ARRANGEMENT AND METHOD FOR PRODUCING THE SAME

Title (de)

GaP-HALBLEITERANORDNUNG UND VERFAHREN ZUR HERSTELLUNG DERSELBEN

Title (fr)

DISPOSITIF A SEMICONDUCTEUR GaP ET SON PROCEDE DE PRODUCTION

Publication

**EP 1084514 A1 20010321 (DE)**

Application

**EP 99936321 A 19990526**

Priority

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Abstract (en)

[origin: DE19824566C1] A semiconductor arrangement comprising a GaP substrate and an epitaxial layer arranged on said substrate whereby said layer contains an n-doped and a p-doped partial layer. A p-n junction is formed in a boundary area between both partial layers. The epitaxial layer contains an extraneous substance, i.e. an element for the 3<rd> and or 5<th> main group, that is not identical to N and the maximum concentration thereof in the GaP epitaxial layer is less than  $10^{20}$  cm<sup>-3</sup>.

IPC 1-7

**H01L 33/00**; **H01L 21/208**

IPC 8 full level

**C30B 19/10** (2006.01); **C30B 29/44** (2006.01); **H01L 21/208** (2006.01); **H01L 33/00** (2010.01); **H01L 33/02** (2010.01); **H01L 33/30** (2010.01)

CPC (source: EP US)

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Citation (search report)

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