

Title (en)  
SEMI-CONDUCTOR DIELECTRIC COMPONENT WITH A PRASEODYMIUM OXIDE DIELECTRIC

Title (de)  
HALBLEITERBAULEMENT MIT PRASEODYMOXID-DIELEKTRIKUM

Title (fr)  
COMPOSANT SEMI-CONDUCTEUR COMPORTANT UN DIELECTRIQUE OXYDE DE PRASEODYME

Publication  
**EP 1547135 A1 20050629 (DE)**

Application  
**EP 03769314 A 20030924**

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Abstract (en)  
[origin: WO2004032216A1] The invention relates to a semi-conductor component having a layer containing silicon and a praseodymium oxide layer, whereon a mixed oxide layer containing silicon, praseodymium and oxygen is arranged between the silicon layer and the praseodymium oxide layer. The layer has a maximum thickness of 5 nanometers. The invention also relates to a method for producing one such semi-conductor component. With the aid of the mixed oxide layer, which contains a silicon oxide intermediate layer, the capacity of the component can be improved in relation to components known per se. High charge carrier movement is also obtained without the need for a silicon oxide intermediate layer.

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