

Title (en)
INTEGRATED ELECTRONIC CIRCUIT AND METHOD FOR PRODUCING THE SAME

Title (de)
INTEGRIERTE ELEKTRONISCHE SCHALTUNGSANORDNUNG UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)
CIRCUIT ELECTRONIQUE INTEGRE ET SON PROCEDE DE PRODUCTION

Publication
EP 1062696 A1 20001227 (DE)

Application
EP 99917747 A 19990217

Priority
• DE 9900437 W 19990217
• DE 19810825 A 19980312

Abstract (en)
[origin: DE19810825A1] The integrated circuit has a semiconductor substrate (10), at least one inductance and at least one insulation region. The insulation region is formed from a porous semiconductor material (50). The insulation region extends deeper into the semiconductor substrate than the inductance. The porous semiconductor material and the semiconductor substrate preferably contain the same semiconductor elements. The porosity of the semiconductor material is preferably between 20 and 80 %. The material may be chemically transformed to improve its insulation properties. The material may e.g. be nitridised or oxidised.

IPC 1-7
H01L 21/762; H01L 27/06; H01L 21/02

IPC 8 full level
H01L 21/02 (2006.01); **H01L 21/76** (2006.01); **H01L 21/822** (2006.01); **H01L 27/04** (2006.01); **H01L 27/06** (2006.01); **H01L 27/08** (2006.01)

CPC (source: EP)
H01L 21/822 (2013.01); **H01L 27/0688** (2013.01); **H01L 27/08** (2013.01); **H01L 28/10** (2013.01)

Citation (search report)
See references of WO 9946815A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19810825 A1 19990916; CN 1301398 A 20010627; EP 1062696 A1 20001227; JP 2002507060 A 20020305; WO 9946815 A1 19990916

DOCDB simple family (application)
DE 19810825 A 19980312; CN 99806113 A 19990217; DE 9900437 W 19990217; EP 99917747 A 19990217; JP 2000536105 A 19990217