

Title (en)
SEMICONDUCTOR DEVICE AND METHOD

Title (de)
HALBLEITEREINRICHTUNG UND VERFAHREN

Title (fr)
DISPOSITIF A SEMI-CONDUCTEUR ET PROCEDE ASSOCIE

Publication
EP 1656701 A4 20071010 (EN)

Application
EP 04781659 A 20040820

Priority

- US 2004027019 W 20040820
- US 64645703 A 20030822
- US 86110304 A 20040604
- US 86132004 A 20040604

Abstract (en)
[origin: WO2005020287A2] Methods and devices are disclosed for producing controllable light emission from a bipolar transistor. Also, a method is disclosed for increasing the speed of a bipolar transistor, including the following steps: providing a bipolar transistor having emitter, base, and collector regions; providing electrodes for coupling electrical signals with the emitter, base, and collector regions; and adapting the base region to enhance stimulated emission to the detriment of spontaneous emission, so as to reduce carrier recombination lifetime in the base region.

IPC 8 full level
H01L 29/205 (2006.01); **H01L 29/737** (2006.01); **H01L 33/00** (2006.01); **H01S 5/06** (2006.01); **H01S 5/062** (2006.01)

IPC 8 main group level
H01L (2006.01)

CPC (source: EP)
H01S 5/06203 (2013.01)

Citation (search report)

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- See references of WO 2005020287A2

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
US 2004027019 W 20040820; CA 2536329 A 20040820; EP 04781659 A 20040820; JP 2006524067 A 20040820; KR 20067003675 A 20060222