

Title (en)
SEMICONDUCTOR OPTICAL AMPLIFIER

Title (de)
OPTISCHER HALBLEITERVERSTÄRKER

Title (fr)
AMPLIFICATEUR OPTIQUE A SEMI-CONDUCTEUR

Publication
EP 1232550 A1 20020821 (FR)

Application
EP 01963110 A 20010820

Priority
• FR 0102632 W 20010820
• FR 0010818 A 20000822

Abstract (en)
[origin: WO0217454A1] The invention concerns a semiconductor optical amplifier comprising at least two amplifying sections (30, 40), each providing, respectively, a higher gain of the TE mode and of the TM mode of the polarisation of the light to be amplified, said sections including each an active guide structure (12) having the same thickness (e). The invention is characterised in that the active guide structure (12) of the two sections (30, 40) is respectively subjected to strains of different tension and/or has a different geometrical shape so as to make the global gain of the amplifier insensitive to the polarisation of said light to be amplified, and the transition between the different sections (30, 40) has continuity of effective refraction indices.

IPC 1-7
H01S 5/50; **H01S 5/0625**

IPC 8 full level
H01S 5/50 (2006.01); **H01S 5/10** (2006.01); **H01S 5/227** (2006.01); **H01S 5/323** (2006.01); **H01S 5/40** (2006.01); **H01S 5/0625** (2006.01)

CPC (source: EP US)
H01S 5/10 (2013.01 - EP US); **H01S 5/5009** (2013.01 - EP US); **H01S 5/0625** (2013.01 - EP US); **H01S 5/1064** (2013.01 - EP US); **H01S 5/1085** (2013.01 - EP US); **H01S 2301/14** (2013.01 - EP US)

Citation (search report)
See references of WO 0217454A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0217454 A1 20020228; **WO 0217454 B1 20020704**; EP 1232550 A1 20020821; FR 2813448 A1 20020301; JP 2004507894 A 20040311; US 2002154391 A1 20021024; US 6751015 B2 20040615

DOCDB simple family (application)
FR 0102632 W 20010820; EP 01963110 A 20010820; FR 0010818 A 20000822; JP 2002522039 A 20010820; US 11037802 A 20020411