

Title (en)

LASER DEVICE WITH AN OPTICAL RESONATOR AND METHOD FOR ADJUSTING THE LASER DEVICE

Title (de)

LASERVORRICHTUNG MIT EINEM OPTISCHEN RESONATOR UND VERFAHREN ZUM JUSTIEREN DER LASERVORRICHTUNG

Title (fr)

DISPOSITIF À LASER POURVU D'UN RÉSONATEUR OPTIQUE ET PROCÉDÉ DE RÉGLAGE DU DISPOSITIF LASER

Publication

**EP 3391480 A1 20181024 (DE)**

Application

**EP 16809007 A 20161207**

Priority

- DE 102015122249 A 20151218
- DE 102016106742 A 20160412
- EP 2016080151 W 20161207

Abstract (en)

[origin: WO2017102520A1] The invention relates to an optical resonator (1) for a laser device (20), in particular for a microchip solid-state laser, comprising an optical medium (4) which is arranged between a first and a second reflective element (2, 3) that are arranged at a distance from one another in a longitudinal direction (P). The optical resonator length is specified by the distance from the first reflective element (2) to the second reflective element (3) in the longitudinal direction (P), the longitudinal extent of the medium (4) arranged between the reflective elements, and the refractive index thereof. According to the invention, the optical resonator length varies in at least one lateral direction (L) running perpendicularly to the longitudinal direction (P). The invention further relates to a laser device (20) comprising such a resonator (1) and to a method for adjusting the laser device (20).

IPC 8 full level

**H01S 3/08** (2006.01); **H01S 3/06** (2006.01); **H01S 3/081** (2006.01)

CPC (source: EP US)

**H01S 3/0615** (2013.01 - EP US); **H01S 3/0617** (2013.01 - EP US); **H01S 3/0627** (2013.01 - EP US); **H01S 3/08022** (2013.01 - EP US); **H01S 3/08059** (2013.01 - EP US); **H01S 3/0813** (2013.01 - EP US); **H01S 3/086** (2013.01 - EP US); **H01S 3/1022** (2013.01 - EP US); **H01S 3/113** (2013.01 - EP US); **H01S 3/0606** (2013.01 - EP US); **H01S 3/0612** (2013.01 - EP US); **H01S 3/094038** (2013.01 - EP US)

Citation (search report)

See references of WO 2017102520A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102016106742 B3 20170119**; EP 3391480 A1 20181024; US 2019006811 A1 20190103; WO 2017102520 A1 20170622

DOCDB simple family (application)

**DE 102016106742 A 20160412**; EP 16809007 A 20161207; EP 2016080151 W 20161207; US 201616062050 A 20160712