

Title (en)
SOLID-STATE LASER SOURCE

Title (de)
FESTKÖRPERLASERQUELLE

Title (fr)
SOURCE LASER A SOLIDE

Publication
EP 3701602 A1 20200902 (FR)

Application
EP 18796599 A 20181018

Priority
• FR 1760099 A 20171026
• EP 2018078529 W 20181018

Abstract (en)
[origin: WO2019081334A1] The present invention relates to a pulsed solid-state laser source (1), comprising a first resonator (R1) formed by a first reflecting mirror (2) and a partially reflecting output mirror (3), and a laser module (4) placed between the mirrors (2, 3) of the first resonator (R1). The first resonator (R1) comprises a laser rod of solid gain material suitable for generating a laser beam, and a laser pump source suitable for emitting a pump beam into the laser rod, wherein the laser rod is suitable for amplifying the pump beam to generate the laser beam, and the output mirror (3) is suitable for partially transmitting the laser beam. The laser source (1) further comprises: a variable attenuating device (QS) that can switch between an opaque state and a transparent state for the laser beam to enable the laser source (1) to operate in a triggered mode, said device (QS) being placed between the laser module (4) and the reflecting mirror (2); a linearly polarising element arranged between the variable attenuating device (QS) and the laser module (4); and a phase-retarding element (8) arranged between the output mirror (3) and the laser module (4).

IPC 8 full level
H01S 3/08 (2006.01); **H01S 3/06** (2006.01); **H01S 3/082** (2006.01); **H01S 3/0941** (2006.01); **H01S 3/105** (2006.01); **H01S 3/115** (2006.01)

CPC (source: EP)
H01S 3/0602 (2013.01); **H01S 3/08054** (2013.01); **H01S 3/08059** (2013.01); **H01S 3/082** (2013.01); **H01S 3/0941** (2013.01);
H01S 3/105 (2013.01); **H01S 3/115** (2013.01)

Citation (search report)
See references of WO 2019081334A1

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)
WO 2019081334 A1 20190502; EP 3701602 A1 20200902; FR 3073098 A1 20190503; FR 3073098 B1 20210122

DOCDB simple family (application)
EP 2018078529 W 20181018; EP 18796599 A 20181018; FR 1760099 A 20171026