

Title (en)
SHORT-PULSE LASER SYSTEM

Title (de)
KURZPULSLASERSYSTEM

Title (fr)
SYSTÈME LASER À IMPULSIONS COURTES

Publication
EP 3520180 A1 20190807 (DE)

Application
EP 17777530 A 20170921

Priority
• DE 102016118391 A 20160928
• EP 2017073890 W 20170921

Abstract (en)
[origin: WO2018060045A1] The invention relates to a short-pulse laser system comprising a first resonator, a second resonator, and an amplification means for amplifying the electromagnetic pulses both in the first resonator as well as in the second resonator. The first resonator supports precisely one first linear polarization state, and the second resonator supports precisely one second linear polarization state perpendicular to the first polarization state. The short-pulse laser system has a first birefringent material section and a second birefringent material section, and the first birefringent material section and/or the second birefringent material section is designed such that the difference between the sum of the optical path length of the first resonator in the first birefringent material section and the optical path length of the first resonator in the second birefringent material section and the sum of the optical path length of the second resonator in the first birefringent material section and the optical path length of the second resonator in the second birefringent material section can be changed in an adjustable manner.

IPC 8 full level
H01S 3/067 (2006.01); **H01S 3/10** (2006.01); **H01S 3/105** (2006.01); **H01S 3/11** (2006.01)

CPC (source: EP US)
H01S 3/06712 (2013.01 - EP US); **H01S 3/06729** (2013.01 - EP US); **H01S 3/06791** (2013.01 - US); **H01S 3/10061** (2013.01 - EP US); **H01S 3/1053** (2013.01 - EP US); **H01S 3/1118** (2013.01 - US); **H01S 3/1118** (2013.01 - EP)

Citation (search report)
See references of WO 2018060045A1

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 102016118391 A1 20180329; **DE 102016118391 B4 20190314**; CN 109792130 A 20190521; EP 3520180 A1 20190807; JP 2019535131 A 20191205; US 2020021077 A1 20200116; WO 2018060045 A1 20180405

DOCDB simple family (application)
DE 102016118391 A 20160928; CN 201780060037 A 20170921; EP 17777530 A 20170921; EP 2017073890 W 20170921; JP 2019514779 A 20170921; US 201716335728 A 20170921