

Title (en)

MIRROR ARRANGEMENT FOR GUIDING A LASER BEAM IN A LASER SYSTEM AND BEAM GUIDING METHOD FOR A LASER BEAM

Title (de)

SPIEGELANORDNUNG ZUR FÜHRUNG EINES LASERSTRAHLS IN EINEM LASERSYSTEM UND STRAHLFÜHRUNGSVERFAHREN FÜR EINEN LASERSTRAHL

Title (fr)

AGENCEMENT DE MIROIRS SERVANT AU GUIDAGE D'UN FAISCEAU LASER DANS UN SYSTÈME LASER ET PROCÉDÉ DE GUIDAGE D'UN FAISCEAU LASER

Publication

**EP 2504894 A1 20121003 (DE)**

Application

**EP 10781675 A 20101119**

Priority

- EP 09177261 A 20091126
- EP 2010067825 W 20101119
- EP 10781675 A 20101119

Abstract (en)

[origin: EP2328243A1] The arrangement has end mirrors (1, 2) forming a resonator with an optical resonator axis (OA). The resonator is formed as Herriott-cell, where laser beam is guided as input laser beam (ES) into the resonator and is guided as output laser beam (AS) from the resonator after multiple reflections at the end mirrors. The sequence of reflections defines a rotational direction between the end mirrors. The resonator is formed such that the rotational direction is reversed in a reversal point and the laser beam traverses the resonator partially with the rotational direction to define a beam path. Independent claims are also included for the following: (1) a laser system comprising Neodymium-doped yttrium orthovanadate laser (2) a method for guiding laser beam in a laser system.

IPC 8 full level

**H01S 3/11** (2006.01); **G02B 17/00** (2006.01); **H01S 3/07** (2006.01); **H01S 3/081** (2006.01); **H01S 3/0941** (2006.01)

CPC (source: EP KR US)

**G02B 17/00** (2013.01 - KR US); **G02B 17/004** (2013.01 - EP KR US); **G02B 17/0657** (2013.01 - KR); **H01S 3/07** (2013.01 - KR); **H01S 3/081** (2013.01 - EP KR US); **H01S 3/0813** (2013.01 - KR); **H01S 3/09415** (2013.01 - KR); **H01S 3/10** (2013.01 - KR US); **H01S 3/1115** (2013.01 - EP KR US); **G02B 17/0657** (2013.01 - EP US); **H01S 3/07** (2013.01 - EP US); **H01S 3/0813** (2013.01 - EP US); **H01S 3/09415** (2013.01 - EP US)

Citation (search report)

See references of WO 2011064147A1

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

DOCDB simple family (publication)

**EP 2328243 A1 20110601**; AU 2010323288 A1 20120524; AU 2010323288 B2 20140612; BR 112012012658 A2 20170926; CA 2781030 A1 20110603; CN 102668276 A 20120912; CN 102668276 B 20141029; EP 2504894 A1 20121003; IL 219531 A0 20120628; IL 219531 A 20150924; JP 2013512557 A 20130411; JP 5826186 B2 20151202; KR 101735429 B1 20170515; KR 20120105016 A 20120924; US 2013114631 A1 20130509; US 8780947 B2 20140715; WO 2011064147 A1 20110603

DOCDB simple family (application)

**EP 09177261 A 20091126**; AU 2010323288 A 20101119; BR 112012012658 A 20101119; CA 2781030 A 20101119; CN 201080053618 A 20101119; EP 10781675 A 20101119; EP 2010067825 W 20101119; IL 21953112 A 20120502; JP 2012540372 A 20101119; KR 20127016488 A 20101119; US 201013511897 A 20101119