

Title (en)

DUAL WAVELENGTH LASER DEVICE AND SYSTEM COMPRISING SAME

Title (de)

ZWEIFACH-WELLENLÄNGEN-LASEREINRICHTUNG UND SYSTEM DAMIT

Title (fr)

DISPOSITIF LASER À DEUX LONGUEURS D'ONDE ET SYSTÈME COMPRENANT UN TEL DISPOSITIF

Publication

**EP 1861902 A1 20071205 (FR)**

Application

**EP 06726016 A 20060303**

Priority

- FR 2006000478 W 20060303
- FR 0502228 A 20050304

Abstract (en)

[origin: WO2006092509A1] The invention concerns a laser device (1, 13) comprising: a three-level amplifying medium (3) adapted to emit a first laser beam (3) of fundamental wavelength; a four-level amplifying medium (5) adapted to emit a second laser beam (7) of fundamental wavelength; a non-linear crystal (4) adapted to mix the first and second beams and to generate a third beam (14, 15) whereof the frequency is the sum of the frequencies of said first and second laser beams. Said device is characterized in that the three-level amplifying medium (3) and at least the non-linear crystal (4) form a resonant cavity for the first laser beam (6), and the four-level amplifying medium (5) and at least the non-linear crystal (4) form a resonant cavity for the second laser beam (7), the two amplifying media and the non-linear crystal forming a linear cavity.

IPC 8 full level

**H01S 3/108** (2006.01); **H01S 3/08** (2006.01); **H01S 3/09** (2006.01); **H01S 3/10** (2006.01)

CPC (source: EP US)

**H01S 3/07** (2013.01 - EP US); **H01S 3/081** (2013.01 - EP US); **H01S 3/09415** (2013.01 - EP US); **H01S 3/108** (2013.01 - EP US); **H01S 3/0604** (2013.01 - EP US); **H01S 3/0627** (2013.01 - EP US); **H01S 3/08086** (2013.01 - EP US); **H01S 3/1611** (2013.01 - EP US); **H01S 3/1673** (2013.01 - EP US); **H01S 2302/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2006092509A1

Citation (examination)

US 5651019 A 19970722 - GOLDBERG LEW [US], et al

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Designated extension state (EPC)

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DOCDB simple family (publication)

**FR 2882860 A1 20060908**; **FR 2882860 B1 20090522**; CN 101138137 A 20080305; CN 101138137 B 20100929; EP 1861902 A1 20071205; IL 185698 A0 20080106; JP 2008532305 A 20080814; US 2008192782 A1 20080814; WO 2006092509 A1 20060908

DOCDB simple family (application)

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