

Title (en)

LASER SOURCE WAVELENGTH MULTIPLEXER

Title (de)

WELLENLÄNGENMULTIPLEXER FÜR LASER-QUELLEN

Title (fr)

MULTIPLEXEUR EN LONGUEURS D'ONDES DE SOURCES LASERS

Publication

**EP 1155484 A1 20011121 (FR)**

Application

**EP 00993665 A 20001221**

Priority

- FR 0003644 W 20001221
- FR 9916401 A 19991223

Abstract (en)

[origin: WO0148882A1] The invention concerns a wavelength multiplexer comprising: a plurality of laser sources (S1 to Sn, 1.1 to 1.n) emitting beams at different wavelengths; a first diffraction grating (3) forming a cavity mirror for the laser diodes. Said grating comprises an assembly of juxtaposed sub-gratings with different pitches. Each sub-grating receives one or several laser beams, retroreflects part of the beam(s) and transmits the other part of the beam in an output direction (U), said direction being the same for all the sub-beams; a focusing optics which is located in the output direction (U) (lens 5), and which focuses into a focal point the beams emitted by the laser sources; a second diffraction grating (6) which is located at said focal point, receives said emitted beams. The angles of incidence of said beams on the diffraction grating are such that the latter superimposes the beams after diffraction.

IPC 1-7

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IPC 8 full level

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