

Title (en)  
COMPUTER CONTROLLED TUNING OF LASERS.

Title (de)  
RECHNERGESTEUERTE ABSTIMMUNG VON LASERN.

Title (fr)  
SYNTONISATION DE LASERS COMMANDEE PAR ORDINATEUR.

Publication  
**EP 0248797 A4 19890427 (EN)**

Application  
**EP 86901020 A 19860204**

Priority  
AU PG920485 A 19850208

Abstract (en)  
[origin: WO8604746A1] A laser (10) of the type having a cavity (11), front window (12) and Brewster window (13) is tuned to its characteristic lines in its gain envelope by the angular rotational and/or longitudinal movement of grating (14) relative to the cavity axis. The grating (14) is mounted on a turn-table (15) and the angular and longitudinal position of the grating (14) is tuned to one of its characteristic lines as determined by the detector (18). The photoacoustic cell (22) receives a portion of the output beam of the laser (10) and from the absorption characteristics of the gas in the photoacoustic cell (22), the identity of the characteristic line of the laser (1) can be determined, together with the corresponding position of the grating (14) for that line.

IPC 1-7  
**H01S 3/105**

IPC 8 full level  
**H01S 3/137** (2006.01); **G01M 3/24** (2006.01); **G01M 3/38** (2006.01); **H01S 3/00** (2006.01); **H01S 3/1055** (2006.01); **H01S 3/139** (2006.01)

CPC (source: EP)  
**G01M 3/24** (2013.01); **G01M 3/38** (2013.01); **H01S 3/0014** (2013.01); **H01S 3/1055** (2013.01); **H01S 3/139** (2013.01)

Citation (search report)

- [Y] US 4425648 A 19840110 - HOLLY SANDOR [US]
- [A] US 4176959 A 19791204 - KEENE WAYNE H [US], et al
- [Y] JOURNAL OF PHYSICS E. SCIENTIFIC INSTRUMENTS, vol. 12, no. 10, October 1979, pages 915-918, The Institute of Physics, New York, US; H.L. SELZLE et al.: "Absolute wavelength scan of a laser with microprocessor control"
- See references of WO 8604746A1

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