

Title (en)
FIBRE LASER SENSOR

Title (de)
FASERLASER-SENSOR

Title (fr)
CAPTEUR A LASER A FIBRE

Publication
EP 1272816 A1 20030108 (DE)

Application
EP 01914952 A 20010405

Priority

- CH 0100220 W 20010405
- DE 10017946 A 20000411

Abstract (en)
[origin: WO0177623A1] A fibre laser sensor has a fibre laser (FL) comprising two reflectors in the form of a first and a second Bragg grating (4, 5) and a fibre segment (3) located between them. The first Bragg grating (4) is arranged temperature-sensitively. The second Bragg grating is a Chirped Bragg grating (5) whose central wavelength is stabilised in relation to temperature changes. This sensor enables temperature and pressure to be measured separately from each other, simultaneously, beat frequencies of orthogonal self-polarisation modes of the fibre laser (FL) being a measure for pressure and beat frequencies of longitudinal modes being a measure for temperature.

IPC 1-7
G01D 5/353; G01L 11/02

IPC 8 full level
G01D 5/353 (2006.01); **G01L 1/24** (2006.01)

CPC (source: EP US)
G01D 5/35316 (2013.01 - EP US); **G01L 1/246** (2013.01 - EP US)

Citation (search report)
See references of WO 0177623A1

Cited by
CN109932113A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0177623 A1 20011018; AU 4221801 A 20011023; DE 10017946 A1 20020117; EP 1272816 A1 20030108; US 2004071400 A1 20040415;
US 6901187 B2 20050531

DOCDB simple family (application)
CH 0100220 W 20010405; AU 4221801 A 20010405; DE 10017946 A 20000411; EP 01914952 A 20010405; US 25732303 A 20030109