

Title (en)
PERSONNEL-SAFE IN-BODY LASER TREATMENT SYSTEM

Title (de)
FÜR DEN PATIENTEN SICHERES KÖRPERINTERNES LASERBEHANDLUNGSSYSTEM

Title (fr)
SYSTÈME DE TRAITEMENT AU LASER DANS LE CORPS, SANS DANGER POUR LE PERSONNEL

Publication
EP 2713930 A1 20140409 (EN)

Application
EP 12792594 A 20120516

Priority
• US 201161491179 P 20110528
• US 2012038083 W 20120516

Abstract (en)
[origin: WO2012166361A1] A safe, portable low power density, eye-safe, Class I system for in-body laser treatments is disclosed. One such device emits pulsed or continuous laser energy through an optical fiber from within a vessel. In a preferred embodiment, optical fiber and treatment part of body are enclosed within a protective case which protects patient and medical staff by preventing stray laser energy from being emitted beyond the protective case, in a preferred embodiment, a sensing system cuts off lasing energy when it detects backscattering from aiming beam corresponding to stray radiation when fiber is outside or nearly outside the body. In another embodiment, an introducer is temporarily glued to the entry point and acts as a switch when passed or when the fiber is close to it. Laser radiation is preferably emitted at a wavelength and power density such that accidental radiation of a person's eye causes virtually no damage. Described embodiments are applicable to medical conditions including but not limited to hysteroscopic gynecology, endoscopic urology, spinal surgery and otolaryngology.

IPC 8 full level
A61B 19/00 (2006.01); **A61B 18/00** (2006.01); **A61B 18/18** (2006.01); **A61B 18/20** (2006.01); **A61B 18/22** (2006.01); **A61B 18/24** (2006.01); **A61B 19/08** (2006.01); **A61N 5/06** (2006.01); **A61N 5/067** (2006.01)

CPC (source: EP)
A61B 18/24 (2013.01); **A61B 46/10** (2016.02); **A61N 5/067** (2021.08); **A61B 18/1492** (2013.01); **A61B 18/1815** (2013.01); **A61B 2018/00327** (2013.01); **A61B 2018/00339** (2013.01); **A61B 2018/00345** (2013.01); **A61B 2018/00404** (2013.01); **A61B 2018/00517** (2013.01); **A61B 2018/00547** (2013.01); **A61B 2018/00559** (2013.01); **A61B 2018/00577** (2013.01); **A61B 2018/00642** (2013.01); **A61B 2018/00708** (2013.01); **A61B 2018/00898** (2013.01); **A61B 2018/2005** (2013.01); **A61B 2018/2025** (2013.01); **A61B 2090/0445** (2016.02); **A61B 2090/0481** (2016.02); **A61B 2090/049** (2016.02); **A61N 5/0603** (2013.01); **A61N 5/062** (2013.01); **A61N 2005/0602** (2013.01); **A61N 2005/061** (2013.01); **A61N 2005/0612** (2013.01)

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)
WO 2012166361 A1 20121206; EP 2713930 A1 20140409; EP 2713930 A4 20141105

DOCDB simple family (application)
US 2012038083 W 20120516; EP 12792594 A 20120516