

Title (en)

LASER TREATMENT DEVICE AND WORKSTATION COMPRISING SUCH A DEVICE

Title (de)

LASERBEHANDLUNGSVORRICHTUNG UND ARBEITSSTATION MIT EINER DERARTIGEN VORRICHTUNG

Title (fr)

DISPOSITIF DE TRAITEMENT LASER ET STATION DE TRAVAIL COMPORTANT UN TEL DISPOSITIF

Publication

EP 3295229 A2 20180321 (FR)

Application

EP 16730450 A 20160513

Priority

- FR 1554317 A 20150513
- FR 2016051141 W 20160513

Abstract (en)

[origin: WO2016181088A2] The invention relates to a laser treatment device and a workstation comprising such a device. The laser treatment device comprises a laser head including an optical fibre terminating in a beam focusing end piece that is shaped from the free end portion (5') of the fibre so as to form a single part therewith. The device (1) is characterised in that the focusing end piece (6) is rotationally symmetrical about an axis and has a shape defined externally by a substantially semi-elliptic convex curve of given dimensions, and in that the distance d between the tip (6'') of the focusing end piece (6) and the working area (9), and the shape and positioning of the end piece (6) are such that the laser head (2) generates a slightly divergent, focused laser beam in the form of a photon jet, having a diameter at the working area (9) of the order of magnitude of the wavelength.

IPC 8 full level

G02B 6/028 (2006.01); **B23K 26/06** (2014.01); **G02B 6/255** (2006.01); **G02B 6/26** (2006.01)

CPC (source: CN EP US)

B23K 26/0648 (2013.01 - CN EP US); **B23K 26/21** (2015.10 - US); **G02B 6/0288** (2013.01 - CN EP US); **G02B 6/2552** (2013.01 - CN EP US); **G02B 6/262** (2013.01 - CN EP US); **G02B 6/3624** (2013.01 - US); **G02B 27/0994** (2013.01 - US); **B23K 2103/54** (2018.07 - EP US)

Citation (search report)

See references of WO 2016181088A2

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016181088 A2 20161117; **WO 2016181088 A3 20170105**; CN 107864672 A 20180330; EP 3295229 A2 20180321; FR 3036050 A1 20161118; FR 3036050 B1 20170609; JP 2018521859 A 20180809; US 2018120506 A1 20180503

DOCDB simple family (application)

FR 2016051141 W 20160513; CN 201680027547 A 20160513; EP 16730450 A 20160513; FR 1554317 A 20150513; JP 2018511526 A 20160513; US 201615573044 A 20160513