

Title (en)
LIGHT CENTRALIZER FOR FIBER LASER CUTTING MACHINES

Title (de)
LICHTZENTRIERVORRICHTUNG FÜR FASERLASERSCHNEIDMASCHINEN

Title (fr)
CENTREUR DE LUMIÈRE POUR MACHINES DE DÉCOUPE LASER À FIBRE

Publication
EP 4182114 A4 20240124 (EN)

Application
EP 21846543 A 20210625

Priority
• TR 202011526 A 20200720
• TR 2021050655 W 20210625

Abstract (en)
[origin: WO2022019865A1] The present invention is a centralizer mechanism (100) for automatically adjusting of laser light, produced for cutting metal and similar materials in fiber laser cutting machines (M), while the laser light is passing through the nozzle (121) of the processing head, wherein light axial adjustment motor box (110) is provided which is connected to the laser cutting head (120) and which has at least two sensitive step motors used for adjusting through the user screen (140) automatically or by the user in the direction of X and Y axes for centering the light; contactless automatically focused automatic laser light centralizer system (130) is provided which has light axial adjustment motor box (110) and laser cutting head (120) assembled one on the other and which corresponds and adjusts the laser cutting head (120) with the camera (133) by pushing the slide (132) connected to the spring (131) for centering the laser light; a user screen (140) is provided for corresponding the laser cutting light, which passes through the nozzle (121) and having reduced voltage, to the camera (134) as the centralizer mechanism (100) compresses the slide (132) connected to the spring (131) when the light centering command comes on the user side through the computer unit and for bringing the fiber cutting light source view (141), which is outside of the position area (142) where the fiber light source must exist in the nozzle diameter (143), to the position area (142) where the fiber light source must exist.

IPC 8 full level
B23K 26/03 (2006.01); **B23K 26/042** (2014.01); **B23K 26/14** (2014.01); **B23K 26/38** (2014.01); **G01B 11/27** (2006.01)

CPC (source: EP)
B23K 26/032 (2013.01); **B23K 26/042** (2015.10); **B23K 26/1464** (2013.01); **B23K 26/38** (2013.01)

Citation (search report)
• [Y] WO 2019009833 A2 20190110 - DENER MAKINA SANAYI VE TICARET LTD SIRKETI [TR]
• [A] EP 1561538 A1 20050810 - MESSER CUTTING & WELDING GMBH [DE]
• [Y] CN 205129178 U 20160406 - JIANGSU DNCON LASER TECH CO LTD
• [A] US 2020070283 A1 20200305 - MARKUSHOV IURII V [US], et al
• See also references of WO 2022019865A1

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 2022019865 A1 20220127; EP 4182114 A1 20230524; EP 4182114 A4 20240124; TR 202011526 A2 20200921

DOCDB simple family (application)
TR 2021050655 W 20210625; EP 21846543 A 20210625; TR 202011526 A 20200720