Title (en)

METHOD FOR IDENTIFYING JOINING POINTS OF WORKPIECES AND LASER MACHINING HEAD COMPRISING A DEVICE FOR CARRYING OUT THIS METHOD

Title (de)

VERFAHREN ZUM ERKENNEN VON FÜGEPOSITIONEN VON WERKSTÜCKEN UND LASERBEARBEITUNGSKOPF MIT EINER VORRICHTUNG ZUR DURCHFÜHRUNG DIESES VERFAHRENS

Title (fr)

PROCÉDÉ DE REPÉRAGE DE POSITIONS D'ASSEMBLAGE DE PIÈCES ET TÊTE D'USINAGE LASER COMPRENANT UN DISPOSITIF POUR LA MISE EN OEUVRE DE CE PROCÉDÉ

Publication

EP 3580008 A1 20191218 (DE)

Application

EP 18705365 A 20180212

Priority

- DE 102017102762 A 20170213
- EP 2018053424 W 20180212

Abstract (en)

[origin: WO2018146303A1] The invention relates to a method for identifying joining points of workpieces and to a laser machining head comprising: a housing, through which a work laser beam path (10) is passed, and a device for carrying out the method for identifying joining points of workpieces, which device has: a camera (16) for capturing images of a joining point (6) of workpieces, the viewing beam path (17) of the camera being coupled coaxially into the work laser beam path (10); and an illumination device (19), the illumination beam path (21) of which is coupled coaxially into the viewing beam path (17) and into the work laser beam path (10). In said method, images of a joining point are captured by a camera (16) and from the images of the joining point (6) measurement data for the joining points is determined, which measurement data is associated with the course of the joining point (6). A model of the course of the joining point is determined from one portion of the measurement data, the model providing a data curve that was adapted to the measurement data with the aid of the model, said curve being output in order to control a joining process and/or to determine additional quality characteristics.

IPC 8 full level

B23K 26/03 (2006.01); **B23K 9/127** (2006.01); **B23K 26/044** (2014.01); **B23K 31/12** (2006.01); **G01B 11/14** (2006.01)

CPC (source: EP US)

B23K 9/1274 (2013.01 - EP US); **B23K 26/0006** (2013.01 - US); **B23K 26/032** (2013.01 - EP US); **B23K 26/044** (2015.10 - EP US); **B23K 26/0648** (2013.01 - US); **B23K 31/125** (2013.01 - EP US); **G01B 11/14** (2013.01 - EP US); **G01B 11/24** (2013.01 - EP US)

Citation (search report)

See references of WO 2018146303A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

WO 2018146303 A1 20180816; CN 110382159 A 20191025; CN 110382159 B 20220830; DE 102017102762 A1 20180816; DE 102017102762 B4 20230615; EP 3580008 A1 20191218; US 11534860 B2 20221227; US 2020038993 A1 20200206

DOCDB simple family (application)

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