

Title (en)

METHOD AND DEVICE FOR JOINING AT LEAST TWO COMPONENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM FÜGEN VON WENIGSTENS ZWEI BAUTEILEN

Title (fr)

PROCÉDÉ ET DISPOSITIF D'ASSEMBLAGE D'AU MOINS DEUX ÉLÉMENTS

Publication

EP 3291951 A1 20180314 (DE)

Application

EP 16725759 A 20160503

Priority

- DE 102015005759 A 20150505
- EP 2016000726 W 20160503

Abstract (en)

[origin: WO2016177466A1] The invention relates to a method for joining at least two components (10, 12), a joining element (14) being inserted into the two components (10, 12) and, as this takes place, at least one parameter being determined which quantifies the joining process, said joining element (14) being inserted by means of a robot (16) and the at least one parameter which quantifies the joining process being determined by means of said robot (16). The invention also relates to a device for joining at least two components (10, 12).

IPC 8 full level

B25J 11/00 (2006.01); **B21D 39/03** (2006.01); **B21J 15/02** (2006.01); **B21J 15/28** (2006.01); **B25J 13/08** (2006.01)

CPC (source: EP US)

B21D 39/03 (2013.01 - EP US); **B21J 15/02** (2013.01 - EP US); **B21J 15/025** (2013.01 - EP US); **B21J 15/285** (2013.01 - EP US); **B25J 11/007** (2013.01 - EP US); **B25J 13/08** (2013.01 - EP US); **G01L 5/24** (2013.01 - US)

Citation (search report)

See references of WO 2016177466A1

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)

DE 102015005759 A1 20151203; CN 107530880 A 20180102; EP 3291951 A1 20180314; US 10730100 B2 20200804; US 2019210093 A1 20190711; WO 2016177466 A1 20161110

DOCDB simple family (application)

DE 102015005759 A 20150505; CN 201680025728 A 20160503; EP 16725759 A 20160503; EP 2016000726 W 20160503; US 201615571798 A 20160503