

Title (en)

FRICION-STIR WELDING DEVICE AND METHOD FOR JOINING WORKPIECES USING A FRICTION-STIR WELDING METHOD

Title (de)

RÜHRREIBSCHWEISSVORRICHTUNG SOWIE VERFAHREN ZUM FÜGEN VON WERKSTÜCKEN MITTELS EINES RÜHRREIBSCHWEISSVERFAHRENS

Title (fr)

DISPOSITIF DE SOUDURE PAR FRICTION-MALAXAGE ET PROCÉDÉ D'ASSEMBLAGE DE PIÈCES AU MOYEN D'UN PROCÉDÉ DE SOUDURE PAR FRICTION-MALAXAGE

Publication

**EP 2747930 A1 20140702 (DE)**

Application

**EP 12737494 A 20120717**

Priority

- DE 102011111750 A 20110824
- EP 2012003011 W 20120717

Abstract (en)

[origin: WO2013026513A1] The invention relates to a friction-stir welding device for joining workpieces 1, 2, comprising a welding pin 3 that can be rotated about the welding pin central axis 9 by means of a drive and comprising at least one clamping device for clamping the workpieces 1, 2 to be joined. The invention is characterized in that the clamping device comprises at least two clamping elements 10, 11, each of which has an undercut guide track 12. The guide tracks 12 are arranged parallel to one another and parallel to a joining region 8. A sliding element 13 is arranged between the clamping elements 10, 11, said sliding element being retained against the workpieces 1, 2 by the guide tracks 12 and being movable along the guide tracks 12 in a translational manner. The sliding element 12 is provided with an opening 14 through which the welding pin 3 is passed. The invention also relates to a method for friction-stir welding using the aforementioned device.

IPC 8 full level

**B23K 20/12** (2006.01)

CPC (source: EP US)

**B23K 20/1245** (2013.01 - EP US); **B23K 20/1255** (2013.01 - US); **B23K 20/126** (2013.01 - EP US)

Citation (search report)

See references of WO 2013026513A1

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)

**DE 102011111750 B3 20121213**; EP 2747930 A1 20140702; US 2015069114 A1 20150312; US 9132505 B2 20150915; WO 2013026513 A1 20130228

DOCDB simple family (application)

**DE 102011111750 A 20110824**; EP 12737494 A 20120717; EP 2012003011 W 20120717; US 201214240678 A 20120717