

Title (en)

METHOD FOR THE PUNCHING OF A BLIND HOLE IN A METAL BILLET

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES SACKLOCHS IN EINEM METALLISCHEN KÖRPER

Title (fr)

PROCÉDÉ DE POINÇONNAGE D'UN TROU AVEUGLE DANS UN OBJET MÉTALLIQUE

Publication

**EP 2953745 B1 20201223 (DE)**

Application

**EP 14707090 A 20140125**

Priority

- DE 102013001918 A 20130205
- EP 2014000196 W 20140125

Abstract (en)

[origin: WO2014121899A1] The invention relates to a method for producing a blind hole (10) in a metallic workpiece having at least one curved surface. One part of the material is pushed starting from approximately the horizontally extending curved tangent and from there approximately perpendicular in the direction of the material of the workpiece by means of reciprocating movement. Said method consists of the following steps: a) providing the workpiece with a matrix-type receiving element (16) for the material which is to be displaced; b) pushing the workpiece material by means of a stamp in the axial direction of the receiving element (16), said material stamped by the stamp is initially sheared in an adiabatic state and flows partially into the receiving element (16); c) removing (16) the material projecting from the receiving element.

IPC 8 full level

**B21K 23/00** (2006.01); **B21K 1/64** (2006.01); **B23P 15/00** (2006.01); **F16B 37/00** (2006.01)

CPC (source: EP US)

**B21J 5/002** (2013.01 - US); **B21J 5/06** (2013.01 - US); **B21K 1/64** (2013.01 - EP US); **B21K 23/00** (2013.01 - EP US)

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 102013001918 A1 20140807**; **DE 102013001918 B4 20191219**; CN 105050750 A 20151111; EP 2953745 A1 20151216; EP 2953745 B1 20201223; US 10105750 B2 20181023; US 2015367403 A1 20151224; WO 2014121899 A1 20140814

DOCDB simple family (application)

**DE 102013001918 A 20130205**; CN 201480007548 A 20140125; EP 14707090 A 20140125; EP 2014000196 W 20140125; US 201414765848 A 20140125