

Title (en)

SHAPING TOOL FOR A WORKPIECE, AND DEVICE FOR DEFORMING A WORKPIECE USING SUCH A TOOL

Title (de)

UMFORMWERKZEUG FÜR EIN WERKSTÜCK UND VORRICHTUNG ZUM VERFORMEN EINES WERKSTÜCKS MIT EINEM DERARTIGEN WERKZEUG

Title (fr)

OUTIL DE FORMAGE D'UNE PIÈCE ET DISPOSITIF DE DÉFORMATION D'UNE PIÈCE AVEC UN TEL OUTIL

Publication

EP 3119539 B1 20200311 (DE)

Application

EP 15712108 A 20150320

Priority

- DE 102014103799 A 20140320
- EP 2015055878 W 20150320

Abstract (en)

[origin: WO2015140280A1] The invention relates to a shaping tool (3) for a workpiece (2), in particular for plastically shaping a pipe end, comprising a clamping device (17) which comprises multiple clamping segments (18) and comprising a compressing head (9) which has a depression (10) on one side for forming a workpiece contour to be shaped and a securing means (11) on the opposite side for connecting to a shaping piston (5) of a device (1) for deforming the workpiece (2). The aim of the invention is to allow a reduction of the assembly complexity when changing tools while ensuring a high degree of assembly security. This is achieved in that the compressing head (9) and the clamping device (17) are structurally connected in a circumferential manner in a single tool unit (3) so as to allow an axial movement relative to each other. In the device (1) according to the invention, such a shaping device (3), in the form of the tool unit (3), is arranged on a common longitudinal axis (X-X) together with a shaping assembly (5, 6, 7, 8, 9) which is actuated by the pressure of a fluid (F) and together with a clamping assembly (15, 16, 17, 19) which is actuated by the pressure of the fluid, and the shaping device can be connected to a cylinder unit (4).

IPC 8 full level

B21D 17/02 (2006.01); **B21J 5/08** (2006.01)

CPC (source: CN EP US)

B21D 17/025 (2013.01 - EP US); **B21D 19/00** (2013.01 - CN); **B21D 37/04** (2013.01 - CN); **B21D 37/10** (2013.01 - CN);
B21D 41/00 (2013.01 - CN); **B21D 41/04** (2013.01 - US)

Cited by

DE102022121718A1

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 2015140280 A1 20150924; BR 112016017295 B1 20210309; CN 106102950 A 20161109; CN 106102950 B 20191122;
DE 102014103799 A1 20150924; DE 102014103799 B4 20180705; EP 3119539 A1 20170125; EP 3119539 B1 20200311;
ES 2785548 T3 20201007; PL 3119539 T3 20200824; US 10449588 B2 20191022; US 11491526 B2 20221108; US 2017095851 A1 20170406;
US 2020001341 A1 20200102

DOCDB simple family (application)

EP 2015055878 W 20150320; BR 112016017295 A 20150320; CN 201580012877 A 20150320; DE 102014103799 A 20140320;
EP 15712108 A 20150320; ES 15712108 T 20150320; PL 15712108 T 20150320; US 201515126862 A 20150320;
US 201916570763 A 20190913