

Title (en)

Method and device for forming workpieces

Title (de)

Vorrichtung und Verfahren zum Umformen von Werkstücken

Title (fr)

Dispositif et procédé destinés au formage de pièces

Publication

EP 2343138 B1 20150422 (DE)

Application

EP 10000210 A 20100112

Priority

EP 10000210 A 20100112

Abstract (en)

[origin: EP2343138A1] The device has an inner molding tool is arranged coaxial to machine main axis (x) of a main spindle (1.1) that comprises a driver (11). The inner molding tool is axially positioned and/or axially moved relative to axial position of an outer molding tool (8), which is radially positioned or moved radially, during formation of a blank mold, which is formed as a rotationally symmetrical hollow body. The inner molding tool has a spherical, outer contour that has a set of conical, concave, and/or convex transitions. An independent claim is also included for a method for producing workpieces from a blank mold.

IPC 8 full level

B21D 22/16 (2006.01)

CPC (source: EP US)

B21B 17/02 (2013.01 - US); **B21B 17/04** (2013.01 - US); **B21B 17/06** (2013.01 - US); **B21B 17/08** (2013.01 - US); **B21B 23/00** (2013.01 - US);
B21B 37/16 (2013.01 - US); **B21D 22/16** (2013.01 - EP US)

Citation (opposition)

Opponent : Leifeld Metal Spinning AG

EP 2210682 A1 20100728 - LEIFELD METAL SPINNING GMBH [DE]

Cited by

EP3025802A1; US10569321B2

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

EP 2343138 A1 20110713; EP 2343138 B1 20150422; CN 102712023 A 20121003; ES 2543005 T3 20150813; US 10124388 B2 20181113;
US 2012285215 A1 20121115; WO 2011085948 A1 20110721; WO 2011085948 A8 20120607

DOCDB simple family (application)

EP 10000210 A 20100112; CN 201180004696 A 20110107; EP 2011000035 W 20110107; ES 10000210 T 20100112;
US 201113521298 A 20110107