

Title (en)

METHOD FOR THE MANUFACTURE OF FORGED LIGHT ALLOY WORKPIECES WITH FULL AND HOLLOW CROSS-SECTIONS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON GESCHMIEDETEN WERKSTÜCKEN AUS LEICHTMETALLLEGIERUNG MIT VOLL- UND HOHL-QUERSCHNITTEN

Title (fr)

PROCEDE DE FABRICATION DE PIECES FORGEES EN ALLIAGE LEGER INCORPORANT DES SECTIONS PLEINES OU TIREES D'EPAISSEUR

Publication

EP 2555886 B1 20140625 (FR)

Application

EP 11719334 A 20110405

Priority

- FR 1052586 A 20100406
- FR 2011050757 W 20110405

Abstract (en)

[origin: WO2011124836A1] The process comprises: a) definition of the final hollow part in its internal portion after forging, with deformation of the solid or thinned-down sections; b) modelling of the solid and thinned-down sections; c) formation of the thinned-down sections by means of recyclable single-material cores positioned at the places requiring zones with a thinned-down section, and modelling of the core(s); d) after modelling, definition of the semi-finished product (2) and of the cores in their initial forms having a different configuration from the forged cores; e) after casting of the metal around the core(s), in the prior initial form, striking of the semi-finished product with its cores, resulting in the part and its cores being deformed from their initial shapes to their final shapes; f) fettling of the part; and g) removal of the cores.

IPC 8 full level

B21J 5/00 (2006.01); **B21K 21/00** (2006.01); **B22D 31/00** (2006.01)

CPC (source: EP US)

B21J 5/00 (2013.01 - EP US); **B21J 5/002** (2013.01 - EP US); **B21K 21/00** (2013.01 - EP US); **B22D 25/02** (2013.01 - US); **B22D 31/002** (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)

FR 2958193 A1 20111007; **FR 2958193 B1 20120629**; BR 112012025340 A2 20160628; BR 112012025340 B1 20201117; CN 102917815 A 20130206; CN 102917815 B 20150225; EP 2555886 A1 20130213; EP 2555886 B1 20140625; ES 2505499 T3 20141010; HR P20140914 T1 20141107; JP 2013523457 A 20130617; JP 5850910 B2 20160203; PL 2555886 T3 20141128; PT 2555886 E 20140926; RS 53538 B1 20150227; RU 2012146973 A 20140520; RU 2578282 C2 20160327; US 2013098575 A1 20130425; US 8701741 B2 20140422; WO 2011124836 A1 20111013

DOCDB simple family (application)

FR 1052586 A 20100406; BR 112012025340 A 20110405; CN 201180017871 A 20110405; EP 11719334 A 20110405; ES 11719334 T 20110405; FR 2011050757 W 20110405; HR P20140914 T 20140924; JP 2013503156 A 20110405; PL 11719334 T 20110405; PT 11719334 T 20110405; RS P20140502 A 20110405; RU 2012146973 A 20110405; US 201113638945 A 20110405