

Title (en)
PROCESS FOR MANUFACTURING WHEEL AXLES, IN PARTICULAR FOR RAILWAY CARRIAGES

Title (de)
VERFAHREN ZUM HERSTELLEN VON RADACHSEN, INSBESONDERE FÜR EISENBAHNWAGEN

Title (fr)
PROCÉDÉ DE FABRICATION D'ESSIEUX, EN PARTICULIER POUR VÉHICULES FERROVIAIRES

Publication
EP 2552614 A1 20130206 (DE)

Application
EP 11714912 A 20110324

Priority
• AT 4972010 A 20100329
• AT 2011000145 W 20110324

Abstract (en)
[origin: WO2011120062A1] The invention relates to a method for producing wheel axles, in particular for railway carriages, having a hollow axle body (1), which with respect to thickened bearing seats (2) forms shouldered axle stubs (3) for receiving the wheel and has an inner diameter for the axle stubs (3) smaller than a widened inner diameter between the bearing seats (2), wherein the outer form of the axle body (1) is forged. In order to avoid machining, according to the invention, a hollow forging blank (8) having an inner diameter corresponding at least to the widened inner diameter of the axle body (1) is forged, advancing in the axial direction, using a forging mandrel (13) having a mould section (15) for the widened inner diameter of the axle body (1), before the mould section (15) for the widened inner diameter is pulled out from one end of the hollow forging blank (8) and the still unforged section of the forging blank (8) having the smaller inner diameter is forged with the aid of a forging mandrel (13) having a mould section (14) for the smaller inner diameter of the forging blank (8).

IPC 8 full level
B21C 37/16 (2006.01); **B21K 1/10** (2006.01)

CPC (source: EP)
B21C 37/16 (2013.01); **B21K 1/063** (2013.01); **B21K 1/10** (2013.01)

Citation (search report)
See references of WO 2011120062A1

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 2011120062 A1 20111006; AT 509642 A1 20111015; AT 509642 B1 20130315; BR 112012024426 A2 20160531;
CN 102933329 A 20130213; CN 102933329 B 20160302; EP 2552614 A1 20130206; EP 2552614 B1 20170712; RU 2012145872 A 20140510;
RU 2538136 C2 20150110; UA 107959 C2 20150310

DOCDB simple family (application)
AT 2011000145 W 20110324; AT 4972010 A 20100329; BR 112012024426 A 20110324; CN 201180026816 A 20110324;
EP 11714912 A 20110324; RU 2012145872 A 20110324; UA A201211473 A 20110324