

Title (en)

METHOD AND DEVICE FOR PRODUCING A HALF-SHELL PART

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES HALBSCHALENTEILS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FABRICATION D'UN ÉLÉMENT EN DEMI-COQUE

Publication

EP 2512702 B1 20200429 (DE)

Application

EP 10795664 A 20101215

Priority

- DE 102009059197 A 20091217
- EP 2010069794 W 20101215

Abstract (en)

[origin: WO2011083008A1] The invention relates to a method for producing a half-shell part having a drawing mandrel (1) and a drawing die (2). The aim of creating a method for the process-secure and cost-effective production of highly dimensionally stable half-shell parts is achieved by the invention in that, in a single work step, the drawing mandrel is advanced into the drawing die, a sheet metal blank is preformed to a sheet metal raw part having at least one base section (4), at least one frame section (15) and optionally one flange section (23'), wherein during preforming with the drawing mandrel a material excess is introduced either in the base section and the frame section or in the optional flange section of the sheet metal raw part and the sheet metal raw part is finished so as to form a half-shell part (3) and calibrated.

IPC 8 full level

B21D 22/22 (2006.01); **B21D 22/30** (2006.01); **B21D 24/16** (2006.01); **B21D 37/08** (2006.01); **B21D 51/02** (2006.01)

CPC (source: EP KR US)

B21D 22/22 (2013.01 - EP KR US); **B21D 22/30** (2013.01 - EP KR US); **B21D 24/16** (2013.01 - EP KR US); **B21D 37/08** (2013.01 - EP KR US); **B21D 51/02** (2013.01 - EP KR US); **Y10T 428/1241** (2015.01 - EP US)

Citation (examination)

- JP H07155855 A 19950620 - TOYOTA MOTOR CORP
- JP H11179446 A 19990706 - TOYOTA MOTOR CORP
- JP H08206746 A 19960813 - ISUZU MOTORS LTD
- JP 2007326112 A 20071220 - HIROSHIMA PREFECTURE, et al

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 2011083008 A1 20110714; CN 102665956 A 20120912; CN 102665956 B 20160907; DE 102009059197 A1 20110622; EP 2512702 A1 20121024; EP 2512702 B1 20200429; ES 2804765 T3 20210209; HU E051144 T2 20210301; JP 2013514185 A 20130425; KR 101966404 B1 20190408; KR 20120106822 A 20120926; KR 20170109086 A 20170927; KR 20190008440 A 20190123; PL 2512702 T3 20201102; PT 2512702 T 20200714; US 2012282482 A1 20121108; US 2017225216 A1 20170810

DOCDB simple family (application)

EP 2010069794 W 20101215; CN 201080057678 A 20101215; DE 102009059197 A 20091217; EP 10795664 A 20101215; ES 10795664 T 20101215; HU E10795664 A 20101215; JP 2012543727 A 20101215; KR 20127018807 A 20101215; KR 20177026304 A 20101215; KR 20197001413 A 20101215; PL 10795664 T 20101215; PT 10795664 T 20101215; US 201213524545 A 20120615; US 201715494073 A 20170421