

Title (en)

METHOD FOR PRODUCING COMPOSITE PARTS BY MEANS OF A COMBINATION OF DEEP DRAWING AND IMPACT EXTRUSION

Title (de)

VERFAHREN ZUR FERTIGUNG VON VERBUNDETEILEN DURCH EINE KOMBINATION AUS TIEFZIEHEN UND FLIESSPRESSEN

Title (fr)

PROCÉDÉ DE FABRICATION DE PIÈCES COMPOSITES PAR UNE COMBINAISON D'EMBOUTISSAGE ET D'EXTRUSION

Publication

EP 2707158 A1 20140319 (DE)

Application

EP 11735970 A 20110507

Priority

DE 2011001053 W 20110507

Abstract (en)

[origin: WO2012152235A1] The invention relates to a method for producing a composite part (18) formed from core material (3) and cladding material (2) by means of an impact extrusion process, wherein in a first method step the cladding material (2) externally covering at least part of the composite part (18) produced according to said method is generated from a sheet-shaped or tubular blank (1). In said first method step, the core material (3) is used as a punch insert for the deep-drawing of the cladding material (2), wherein cladding material (2) and core material (3) come into close surface contact with one another. Subsequently, the intermediate form of the composite part (18) pre-formed in such a manner from deep-drawn cladding material (2) and partially enclosing core material (3) is subjected to a common impact extrusion process, wherein the final form of the composite part (18) is produced by plastic deformation.

IPC 8 full level

B21C 23/22 (2006.01); **B21D 22/20** (2006.01); **B21K 25/00** (2006.01)

CPC (source: EP)

B21C 23/22 (2013.01); **B21D 22/203** (2013.01); **B21D 49/00** (2013.01); **B21K 25/00** (2013.01)

Citation (search report)

See references of WO 2012152235A1

Cited by

DE102019002851A1

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 2012152235 A1 20121115; EP 2707158 A1 20140319; EP 2707158 B1 20171129

DOCDB simple family (application)

DE 2011001053 W 20110507; EP 11735970 A 20110507