

Title (en)

METHOD FOR PRODUCING HOT-FORMED COMPONENTS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON WARMUMGEFORMTEN BAUTEILEN

Title (fr)

PROCÉDÉ DE FABRICATION DE COMPOSANTS FORMÉS À CHAUD

Publication

EP 3177416 B1 20240522 (DE)

Application

EP 15736513 A 20150714

Priority

- DE 102014215365 A 20140805
- EP 2015066007 W 20150714

Abstract (en)

[origin: WO2016020148A1] The invention relates to a method for producing a hot-formed component (17), in particular a sheet-metal component made of steel, aluminium, magnesium or a combination of said materials, said method comprising the following steps: heating a semifinished product (16), in particular a sheet-metal blank or a pre-shaped sheet-metal component, inserting the semifinished product (16) into a moulding tool (10), and quenching the semifinished product (16) in the moulding tool (10), wherein a change is made to the microstructure of the material at least in one portion, characterized in that, before the insertion of the semifinished product (16) into the moulding tool (10), an insulating device (15) is applied in at least one predetermined region of the semifinished product (16), said insulating device being connected in a form-fitting, integral and/or force-fitting manner to the semifinished product (16).

IPC 8 full level

F16L 59/00 (2006.01)

CPC (source: CN EP US)

B21D 22/022 (2013.01 - CN EP US); **B21D 22/201** (2013.01 - CN EP US); **B21D 22/208** (2013.01 - CN EP US);
C21D 1/673 (2013.01 - CN EP US); **C21D 8/005** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **C22F 1/06** (2013.01 - EP US);
C21D 2221/00 (2013.01 - CN EP US)

Citation (examination)

DE 10162415 A1 20030703 - SIEMPELKAMP PRESSEN SYS GMBH [DE]

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)

DE 102014215365 A1 20160211; CN 106457337 A 20170222; CN 106457337 B 20191217; EP 3177416 A1 20170614;
EP 3177416 B1 20240522; US 10876179 B2 20201229; US 2017145530 A1 20170525; WO 2016020148 A1 20160211

DOCDB simple family (application)

DE 102014215365 A 20140805; CN 201580022824 A 20150714; EP 15736513 A 20150714; EP 2015066007 W 20150714;
US 201715424228 A 20170203