

Title (en)

MOLDING TOOL FOR PRODUCING HOT-FORMED COMPONENTS

Title (de)

FORMWERKZEUG ZUR HERSTELLUNG VON WARMUMGEFORMTEN BAUTEILEN

Title (fr)

OUTIL DE FORMAGE SERVANT À PRODUIRE DES PIÈCES FORMÉES À CHAUD

Publication

**EP 3212346 A1 20170906 (DE)**

Application

**EP 15787146 A 20151008**

Priority

- DE 102014221997 A 20141029
- EP 2015073207 W 20151008

Abstract (en)

[origin: WO2016066391A1] The invention relates to a molding tool (10) for producing hot-formed components (17), in particular molded sheet-metal parts, comprising a lower tool part (12u) and an upper tool part (12o), which can be moved in relation to each other and which are designed with corresponding active surfaces for shaping the component (17), at least the active surface of one tool part (12u, 12o) being designed to be coolable at least in some segments and cooling lines (14) being provided in the tool part (12u, 12o), characterized in that at least one cut-out (15) is provided in at least one of the two tool parts (12u, 12o), which cut-out forms an air chamber together with the component (17) in a closed state of the tool (10), which air chamber acts as a thermal insulator between the component (17) and the tool part (12o).

IPC 8 full level

**B21D 22/02** (2006.01); **B21D 22/06** (2006.01); **B21D 22/20** (2006.01); **B21D 37/16** (2006.01)

CPC (source: CN EP US)

**B21D 22/022** (2013.01 - CN EP US); **B21D 22/06** (2013.01 - CN EP US); **B21D 22/208** (2013.01 - CN EP US); **B21D 37/16** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2016066391A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102014221997 A1 20160504**; CN 106660097 A 20170510; EP 3212346 A1 20170906; EP 3212346 B1 20200513; US 10537928 B2 20200121; US 2017225214 A1 20170810; WO 2016066391 A1 20160506

DOCDB simple family (application)

**DE 102014221997 A 20141029**; CN 201580039777 A 20151008; EP 15787146 A 20151008; EP 2015073207 W 20151008; US 201715497769 A 20170426