Title (en)
   SHAPING TOOL

Title (de)
   FORMWERKZEUG

Title (fr)
   OUTIL DE FORMAGE

Publication
   EP 1922162 B1 20090225 (DE)

Application
   EP 06791945 A 20060908

Priority
   • EP 2006008793 W 20060908
   • DE 102005042765 A 20050908

Abstract (en)
   [origin: WO2007028641A1] The invention relates to a shaping tool which is used to shape a workpiece, in particular, a sheet steel component, comprising at least two shaping tool halves (2, 3). Contoured regions (6) are provided in the region of the shaping tool halves (2, 3) in order to give the workpiece a corresponding contour, at least in sections. Each shaping tool half (2, 3) has a shaping surface shell (4) which is oriented towards the workpiece and a support shaping half (5). The shaping surface shell (4) is arranged on the support shaping half (5) and comprises a shaping surface, which is oriented towards the workpiece, and a rear side (9) which is oriented away from the workpiece. The support shaping half (5) comprises a contoured area (6) which essentially corresponds to the contour of the workpiece which is to be produced and the contoured area (6) is surrounded by a flange area (7). Grooves (10) are provided in the contoured area (6) in the region of the rear side (9) of the shaping surface shell (4). The support shaping half (5) comprises receiving surfaces (16) which receive the support shaping half (4) in a positive fit and the receiving surfaces (16) and the grooves (10) form cooling channels (10). The support shaping half (5) comprises supply channels (19) and discharge channels (21) such that a coolant can be guided through the channels (10).

IPC 8 full level
   B21D 37/16 (2006.01)

CPC (source: EP US)
   B21D 22/02 (2013.01 - EP US); **B21D 37/16** (2013.01 - EP US); Y10T 29/49805 (2015.01 - EP US)

Cited by
   DE102014107210A1

Designated contracting state (EPC)
   AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
   RS

DOCDB simple family (publication)
   WO 2007028641 A1 20070315; AT E423640 T1 20090315; DE 102005042765 A1 20070322; DE 102005042765 B4 20101209; DE 102005042765 C5 20130103; DE 502006002967 D1 20090409; EA 012661 B1 20091230; EA 200800702 A1 20081030; EP 1922162 A1 20080521; EP 1922162 B1 20090225; ES 2322296 T3 20090618; PL 1922162 T3 20090731; PT 1922162 E 20090423; SI 1922162 T1 20090831; US 2009293571 A1 20091203; US 8047037 B2 20111101

DOCDB simple family (application)
   EP 2006008793 W 20060908; AT 06791945 T 20060908; DE 102005042765 A 20050908; DE 502006002967 T 20060908; EA 200800702 A 20060908; EP 06791945 A 20060908; ES 06791945 T 20060908; PL 06791945 T 20060908; PT 06791945 T 20060908; SI 200630257 T 20060908; US 99151206 A 20060908