

Title (en)
TEMPERATURE-CONTROLLED TOOL

Title (de)
TEMPERIERTES WERKZEUG

Title (fr)
OUTIL THERMORÉGULÉ

Publication
EP 2490837 A2 20120829 (DE)

Application
EP 11795217 A 20110616

Priority

- DE 102010033816 A 20100809
- DE 102010023912 A 20100616
- DE 2011001362 W 20110616

Abstract (en)
[origin: WO2011157266A2] The invention relates to a temperature-controlled tool for shaping sheet metal, comprising an upper tool part (1) and a lower tool part (2), the tool parts (1, 2) having complementary active surfaces (17) according to the desired contour of the sheet metal in order to form the sheet metal and being one-piece or multi-piece, at least one heating device for controlling the temperature of the upper tool part (1) and/or the lower tool part (2) being provided, which heating device is integrated into the particular tool part (1, 2) between a main tool body and the component that defines the active surface (17), and the heating device being substantially thermally insulated all around except from the active surfaces (17). Said temperature-controlled tool is characterized in that the heating device comprises at least two centering elements, which extend toward outside the tool part and which are not thermally insulated and which interact with non-temperature-controlled outer centering blocks (10) in such a way that there is play in the non-temperature-controlled state of the tool part (1, 2) and little or no play at full operating temperature.

IPC 8 full level
B21D 37/16 (2006.01)

CPC (source: EP)
B21D 37/16 (2013.01)

Citation (search report)
See references of WO 2011157266A2

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 102010033816 A1 201111222; EP 2490837 A2 20120829; WO 2011157266 A2 20111222; WO 2011157266 A3 20120419

DOCDB simple family (application)
DE 102010033816 A 20100809; DE 2011001362 W 20110616; EP 11795217 A 20110616