

Title (en)

DEVICE FOR PRODUCING AT LEAST ONE UNDERCUT IN A SLOTTED OR CLOSED PROFILED SHEET SECTION

Title (de)

VORRICHTUNG ZUR HERSTELLUNG MINDESTENS EINES HINTERSCHNITTS IN EIN GESCHLITZTES ODER GESCHLOSSENES BLECHPROFIL

Title (fr)

DISPOSITIF POUR RÉALISER AU MOINS DÉPOUILLE DANS UN PROFILÉ EN TÔLE FENDU OU FERMÉ

Publication

EP 3010664 B1 20170301 (DE)

Application

EP 14723395 A 20140502

Priority

- DE 102013106287 A 20130617
- EP 2014058975 W 20140502

Abstract (en)

[origin: WO2014202271A1] The invention relates to a device for producing at least one undercut in a slotted or closed profiled sheet section, comprising a core (1) that is introduced into the profiled sheet section or is used as a support core for a semifinished sheet metal product from which the profiled sheet section is produced. The device is characterized in that the core (1) has at least two outer core sections (1.1, 1.2), at least one of which has at least one depression (2, 3) or at least one projection for shaping an undercut into the profiled sheet section, and an inner core section (1.3) is arranged between the at least two outer core sections (1.1, 1.2), said inner core section being movable relative to the outer core sections (1.1, 1.2) and having at least one effective surface (1.31, 1.32) which is designed in the shape of a cam or in an inclined manner relative to the outer core sections (1.1, 1.2) in a specified movement direction (P1) of the inner core section (1.3). The outer core sections (1.1, 1.2) are moved away from each other by moving the inner core section (1.3) in the specified movement direction (P1) relative to the outer core sections, and the outer core sections are then moved towards each other upon moving the inner core section (1.3) in the opposite movement direction (P4).

IPC 8 full level

B21D 5/01 (2006.01); **B21D 53/88** (2006.01); **B62D 21/15** (2006.01)

CPC (source: EP US)

B21D 5/015 (2013.01 - EP US); **B21D 13/04** (2013.01 - US); **B21D 53/88** (2013.01 - EP US)

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 102013106287 A1 20141218; CN 105324191 A 20160210; CN 105324191 B 20171128; EP 3010664 A1 20160427; EP 3010664 B1 20170301; ES 2625745 T3 20170720; JP 2016521638 A 20160725; JP 6420827 B2 20181107; KR 102148556 B1 20200826; KR 20160020481 A 20160223; MX 364429 B 20190425; US 2016121383 A1 20160505; US 9895734 B2 20180220; WO 2014202271 A1 20141224

DOCDB simple family (application)

DE 102013106287 A 20130617; CN 201480034620 A 20140502; EP 14723395 A 20140502; EP 2014058975 W 20140502; ES 14723395 T 20140502; JP 2016518881 A 20140502; KR 20167000574 A 20140502; MX 2015016717 A 20140502; US 201414897635 A 20140502