

Title (en)

METHOD AND DEVICE FOR EXPANDING METAL ELEMENTS

Title (de)

VORRICHTUNG UND VERFAHREN ZUM AUFWEITEN VON METALLELEMENTEN

Title (fr)

MÉTHODE ET PROCÉDÉ D'EXPANSION D'ÉLÉMENTS MÉTALLIQUES

Publication

EP 2616199 B1 20160803 (DE)

Application

EP 11761011 A 20110920

Priority

- DE 102010047310 A 20101001
- EP 2011004685 W 20110920

Abstract (en)

[origin: WO2012041453A1] The invention relates to a device which is designed to expand elongate, strip-like metal elements (54) which move in the longitudinal direction and are suitable for forming open profile elements (1), said device comprising a feed station (52), a cutting station (59), a positioning station (67) and a connection station (72). The positioning station comprises at least one, in particular circumferential, positioning device (69, 84, 85, 88) having a multiplicity of positioning elements (71, 86), wherein the positioning elements (71, 86) are designed to engage in openings in the at least one metal element (5, 87) and to position sub-sections of the meandering longitudinal edges (12, 13) produced in the cutting station, in predefined positions with respect to one another.

IPC 8 full level

B21D 47/04 (2006.01); **E04C 3/08** (2006.01)

CPC (source: EP US)

B21D 5/14 (2013.01 - US); **B21D 31/04** (2013.01 - US); **B21D 47/00** (2013.01 - US); **B21D 47/04** (2013.01 - EP US);
E04C 3/086 (2013.01 - EP US); **E04C 3/09** (2013.01 - EP US); **E04C 2003/0413** (2013.01 - EP US); **E04C 2003/0434** (2013.01 - EP US);
E04C 2003/0473 (2013.01 - EP US); **Y10T 29/49826** (2015.01 - EP US); **Y10T 29/5116** (2015.01 - EP US); **Y10T 29/5122** (2015.01 - 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2012041453 A1 20120405; AR 083222 A1 20130206; AU 2011307238 A1 20130418; CA 2813074 A1 20120405;
CN 103260787 A 20130821; DE 102010047310 A1 20120405; DK 2616199 T3 20161121; EP 2616199 A1 20130724; EP 2616199 B1 20160803;
ES 2589002 T3 20161108; JP 2013544649 A 20131219; PL 2616199 T3 20170131; RU 2013120021 A 20141120; TW 201221242 A 20120601;
US 2013283592 A1 20131031; US 9132468 B2 20150915

DOCDB simple family (application)

EP 2011004685 W 20110920; AR P110103610 A 20110929; AU 2011307238 A 20110920; CA 2813074 A 20110920;
CN 201180047769 A 20110920; DE 102010047310 A 20101001; DK 11761011 T 20110920; EP 11761011 A 20110920;
ES 11761011 T 20110920; JP 2013530606 A 20110920; PL 11761011 T 20110920; RU 2013120021 A 20110920; TW 100134938 A 20110928;
US 201113876083 A 20110920