

Title (en)

METAL FORMED PRODUCT INCLUDING TUBULAR PART HAVING SLIT AND MANUFACTURING METHOD THEREFOR, AND MANUFACTURING DEVICE AND DIE USED FOR SAME

Title (de)

AUS METALL GEFORMTES PRODUKT MIT ROHRFÖRMIGEM TEIL MIT SCHLITZ UND HERSTELLUNGSVERFAHREN DAFÜR UND HERSTELLUNGSVORRICHTUNG UND DAFÜR VERWENDETE MATRIZE

Title (fr)

PRODUIT FORMÉ DE MÉTAL COMPRENANT UNE PARTIE TUBULAIRE PRÉSENTANT UNE FENTE ET PROCÉDÉ DE FABRICATION ASSOCIÉ, ET DISPOSITIF DE FABRICATION ET MATRICE UTILISÉS POUR CELUI-CI

Publication

**EP 3263240 A4 20190123 (EN)**

Application

**EP 16755009 A 20160225**

Priority

- JP 2015035754 A 20150225
- JP 2016027388 A 20160216
- JP 2016001012 W 20160225

Abstract (en)

[origin: EP3263240A1] A producing method to be disclosed is a producing method for producing a formed metal item that includes a tubular part (1e) with a slit (3). This producing method includes a step (i) of forming U-shaped part having a U-shaped cross section by deforming a metal plate, and a step (ii) of forming the tubular part (1e) with the slit by deforming the U-shaped part using a die assembly (20) with a protruding part (23) in such a manner that two end parts of the U-shaped part clamp the protruding part. In step (ii), a cross-section peripheral length LH of the tubular part (1e) is made shorter than a cross-section length LU of the U-shaped part.

IPC 8 full level

**B21D 5/01** (2006.01)

CPC (source: EP KR RU US)

**B21C 37/0815** (2013.01 - EP); **B21D 5/01** (2013.01 - KR RU); **B21D 5/015** (2013.01 - EP US); **B21D 5/10** (2013.01 - US); **B21D 37/10** (2013.01 - KR)

Citation (search report)

- [Y] US 1879077 A 19320927 - CARL CARLSEN
- [A] DE 1068204 B
- [A] EP 1584383 A1 20051012 - MUHR & BENDER KG [DE]
- [XY] DE 102009017571 A1 20101111 - EADS DEUTSCHLAND GMBH [DE]
- [Y] JP 2014004626 A 20140116 - JFE STEEL CORP, et al
- [Y] JP 2004298907 A 20041028 - ASAHI SEIKI MFG, et al
- See also references of WO 2016136259A1

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)

**EP 3263240 A1 20180103; EP 3263240 A4 20190123; EP 3263240 B1 20200415**; BR 112017016143 A2 20180417; CA 2975861 A1 20160901; CA 2975861 C 20191001; CN 107427879 A 20171201; JP 6531818 B2 20190619; JP WO2016136259 A1 20171102; KR 101983929 B1 20190529; KR 20170119700 A 20171027; MX 2017010764 A 20171128; RU 2017133119 A 20190325; RU 2017133119 A3 20190325; RU 2683673 C2 20190401; US 2018021829 A1 20180125; WO 2016136259 A1 20160901

DOCDB simple family (application)

**EP 16755009 A 20160225**; BR 112017016143 A 20160225; CA 2975861 A 20160225; CN 201680011678 A 20160225; JP 2016001012 W 20160225; JP 2017501946 A 20160225; KR 20177026533 A 20160225; MX 2017010764 A 20160225; RU 2017133119 A 20160225; US 201615550813 A 20160225