

Title (en)

PROCESS AND DEVICE FOR THE MANUFACTURE OF SOLID SELF-PIERCING RIVETS

Title (de)

VERFAHREN UND WERKZEUG ZUR HERSTELLUNG EINES VOLLSTANZNIETES

Title (fr)

PROCÉDÉ ET APPAREIL DE FABRICATION DE RIVETS SOLIDES AUTO-PERCEURS

Publication

EP 2603335 A1 20130619 (DE)

Application

EP 12740084 A 20120702

Priority

- DE 102011110598 A 20110818
- EP 2012062799 W 20120702

Abstract (en)

[origin: WO2013023831A1] The invention relates to a method for producing a solid punch rivet, in which a trimmed wire piece (8) is deformed by means of a tool (1) comprising a punch (4) and a matrix (2), wherein the wire piece (8) is clamped between shaped parts (33) which are arranged in a jaw like manner and are radially engageable, and which form the peripheral rivet contour (321) and comprise at least one annular groove (322) forming an undercut, and subsequently an axial force is applied to the wire piece (7) at the two ends thereof via a respective pressure pin (24, 46), which results in the wire material fluently filling the peripheral rivet contour formed by the shaped pieces (33). The invention further relates to a tool for producing a solid punch rivet by said method.

IPC 8 full level

B21K 1/58 (2006.01); **B21J 13/02** (2006.01)

CPC (source: EP)

B21J 13/025 (2013.01); **B21K 1/58** (2013.01)

Citation (search report)

See references of WO 2013023831A1

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 102011110598 A1 20130221; EP 2603335 A1 20130619; EP 2603335 B1 20131016; WO 2013023831 A1 20130221

DOCDB simple family (application)

DE 102011110598 A 20110818; EP 12740084 A 20120702; EP 2012062799 W 20120702