

Title (en)

STAMPED RIVET FOR CONNECTION TO SHEET METALS AND METHOD FOR PLACING SAID STAMPED RIVET

Title (de)

STANZNIET FÜR EINE VERBINDUNG AN BLECHEN SOWIE VERFAHREN ZUM SETZEN EINES DERARTIGEN STANZNIETS

Title (fr)

RIVET AUTOPOINCONNEUR DESTINE A ETRE ASSEMBLE A DES TOLES ET PROCEDE DE POSE D'UN TEL RIVET

Publication

EP 1576295 A1 20050921 (DE)

Application

EP 03785833 A 20031216

Priority

- DE 10259334 A 20021218
- EP 0314302 W 20031216

Abstract (en)

[origin: WO2004055397A1] The stamped rivet (10) has a head (12), a shank (14), a peripheral groove (16) formed therein and a shank end (18). The head (12) is provided with a ring-shaped planar surface (20). The peripheral groove (16) is directly adjacent to the lower side of the head (12). One section (22) of the shank is conically tapered in an area located between the peripheral groove (16) and the end (18) of the shank in the direction of the end (18) of said shank. The axial length (L) of the peripheral groove (16) is greater than the thickness of the sheet metal or the overall thickness of the sheet metals upon which a connection to the stamped rivet (10) is to be produced. The Peripheral groove (16) extends to a longitudinal centre (M) of the stamped rivet (10). The length of the tapered section (22) of the shaft (14) corresponds to the axial length (L) of the peripheral groove (16). Sheet metal material, which is forced downwards and to the side during formation of a stamped hole, is plastically deformed into the peripheral groove (16) during the stamping-in process. The axial thickness of the sheet metal material is greater in said deformation area than that of the starting material.

IPC 1-7

F16B 19/06; F16B 5/04; B21J 15/02

IPC 8 full level

F16B 5/04 (2006.01); **F16B 19/06** (2006.01)

CPC (source: EP US)

F16B 5/04 (2013.01 - EP US); **F16B 19/06** (2013.01 - EP US); **F16B 19/086** (2013.01 - EP US)

Citation (search report)

See references of WO 2004055397A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 10259334 C1 20031224; AU 2003294863 A1 20040709; EP 1576295 A1 20050921; US 2006039777 A1 20060223;
WO 2004055397 A1 20040701

DOCDB simple family (application)

DE 10259334 A 20021218; AU 2003294863 A 20031216; EP 0314302 W 20031216; EP 03785833 A 20031216; US 53665705 A 20050527