

Title (en)

METHOD FOR MAKING COUNTER-SUNK HOLES IN A METAL FITTING AS WELL AS A METAL FITTING MANUFACTURED BY THIS METHOD

Publication

**EP 0003518 B1 19821124 (DE)**

Application

**EP 79100180 A 19790122**

Priority

DE 2806094 A 19780214

Abstract (en)

[origin: EP0003518A1] 1. A method of contriving countersunk or counterbored apertures (2, 3) in a metal component of narrow bar or strip material (1), more particularly with a flat rectangular cross-section, as, for example in a faceplate for drive rod fittings, which apertures (2, 3) serve as the inner boundary of a neck (4) projecting from the main plane in the direction of the greatest diameter of such apertures have extending around them a recess (10) disposed opposite the neck (4) and are adapted to receive the heads of fixing elements, more particularly screws, characterised in that the bar or strip material (1) is initially pierced into a free space with a diameter corresponding to the nominal dimension (17) of the aperture (2, 3), whereafter in the same working stroke as the first piercing and immediately thereafter the counter sunk zone is pressed into the aperture and the neck (4) is stamped upwardly with sharp edges and perpendicularly from the main plane of the bar or a strip material (1) concentrically around this initial piercing by the pressing of the counter sunk zone (3) into the initial aperture initially being started from above, whereafter, and from below, a sharp-edged stamping-in of the recess (10) of at least substantially the same diameter (12) as the neck (4) is initiated perpendicularly to the main plane of the bar or strip material (1), whereafter, as the countersunk zone (3) continues to be pressed in further and the recess (10) continues to be stamped in further, the neck (4) is formed upwardly and an annular head (14) is formed in the recess (10) with displacement of material.

IPC 1-7

**B21D 28/24**; **B21D 31/04**; **E05C 9/18**

IPC 8 full level

**B21D 22/04** (2006.01); **B21D 28/24** (2006.01); **B21D 53/38** (2006.01); **E05B 15/02** (2006.01); **E05C 9/18** (2006.01)

CPC (source: EP)

**B21D 22/04** (2013.01); **B21D 28/24** (2013.01); **B21D 53/38** (2013.01); **E05B 15/02** (2013.01)

Cited by

FR2550110A1; EP0610925A1

Designated contracting state (EPC)

BE CH FR GB NL SE

DOCDB simple family (publication)

**DE 2806094 B1 19790405**; **DE 2806094 C2 19861002**; AT 369845 B 19830210; AT A51379 A 19820615; EP 0003518 A1 19790822; EP 0003518 B1 19821124; EP 0003518 B2 19910109

DOCDB simple family (application)

**DE 2806094 A 19780214**; AT 51379 A 19790124; EP 79100180 A 19790122