

Title (en)
SELF-CLINCHING AND SELF-PIERCING CONSTRUCTION ELEMENT WITH MULTI-PURPOSE PILOT

Title (de)
SELBSTSCHLIESSENDES UND SELBSTLOCHENDES BAUELEMENT MIT MEHRZWECKPILOT

Title (fr)
ÉLÉMENT DE CONSTRUCTION À AUTO-CLINCHAGE ET AUTO-PERÇAGE DOTÉ D'UN PILOTE POLYVALENT

Publication
EP 4348067 A1 20240410 (EN)

Application
EP 21943257 A 20210527

Priority
US 2021034548 W 20210527

Abstract (en)
[origin: WO2022250671A1] A self-clinching and self-piercing construction element for attachment to a plastically deformable metal panel. The construction element includes a body portion with a central axis and a punch portion being coaxial with the central axis and extending from the body portion. A pilot embossment is coaxial with the central axis and extends from the body portion such that the pilot embossment is concentrically disposed between an annular-shaped surface of the body portion and the punch portion. The pilot embossment being configured to engage and plastically deform the metal substrate such that the metal substrate flows into a recessed pocket defined in an outer peripheral surface of the punch portion. A plurality of spaced apart lugs axially project outwards from the annular-shaped surface and extend radially outwards from the pilot embossment.

IPC 8 full level
F16B 39/282 (2006.01); **F16B 35/06** (2006.01)

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