

Title (en)

SELF-PIERCING RIVET WITH HIGH MECHANICAL STRENGTH WITH EJECTABLE PIERCING ELEMENT

Title (de)

STANZNIET MIT HOHER MECHANISCHER FESTIGKEIT MIT AUSWERFBAREM DURCHSTOSSER

Title (fr)

RIVET AUTO-PERCEUR À HAUTE RÉSISTANCE MÉCANIQUE AVEC ÉLÉMENT DE PERÇAGE EJECTABLE

Publication

**EP 3368778 A1 20180905 (FR)**

Application

**EP 16809931 A 20161025**

Priority

- FR 1560258 A 20151027
- FR 2016052770 W 20161025

Abstract (en)

[origin: WO2017072439A1] A self-piercing rivet (1) comprises a support flange (2) and an expandable hollow tubular body (2), the body (2) comprising, at one end, a first cylindrical part (5) adjacent to the flange (3) and, at the other end of the body (2), a second cylindrical part (6) arranged to receive a piercing element (4), and a third expandable part (7) between the first and second cylindrical parts (5, 6). The third part (7) of the body (2) and the piercing element (4) each comprise linking means (11, 15) that are arranged in such a way as to detach the piercing element (4) from the body (2) during the expansion of the third part (7) of the body (2).

IPC 8 full level

**F16B 19/08** (2006.01)

CPC (source: CN EP KR US)

**F16B 19/083** (2013.01 - EP KR US); **F16B 19/086** (2013.01 - CN KR)

Citation (search report)

See references of WO 2017072439A1

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**FR 3042830 A1 20170428; FR 3042830 B1 20171103**; BR 112018008485 A2 20181106; CN 106979209 A 20170725; CN 106979209 B 20190405; CN 206449082 U 20170829; EP 3368778 A1 20180905; JP 2018537625 A 20181220; KR 20180071273 A 20180627; US 2018306227 A1 20181025; WO 2017072439 A1 20170504

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**FR 1560258 A 20151027**; BR 112018008485 A 20161025; CN 201610942351 A 20161025; CN 201621165938 U 20161025; EP 16809931 A 20161025; FR 2016052770 W 20161025; JP 2018520173 A 20161025; KR 20187011859 A 20161025; US 201615771866 A 20161025