

Title (en)

FASTENING ELEMENT WITH LARGE-AREA PLAIN WASHER

Publication

EP 0302909 B1 19910619 (DE)

Application

EP 88901240 A 19880113

Priority

AT 10487 A 19870121

Abstract (en)

[origin: WO8805487A1] A fastening element (1) with a large-area plain washer (5) and with a tubular extension (6) adjacent thereto for passing through and guiding a screw (4). The plain washer (5) and the tubular extension (6) form separate prefabricated parts. The tubular extension (6) has at its end facing the plain washer (5) a shoulder (7) that engages a corresponding recess (20) in the area of a through-hole in the plain washer (5). The section (8) of the tubular extension (6) adjacent to the shoulder (7) can be introduced through the opening in the plain washer (5). The screw (4) is introduced in the extension (6) either before or after the extension (6) has been introduced in the plain washer (5).

IPC 1-7

E04D 3/36; **E04F 13/08**

IPC 8 full level

E04D 3/36 (2006.01); **E04F 13/08** (2006.01); **E04D 15/04** (2006.01)

CPC (source: EP US)

E04D 3/3603 (2013.01 - EP US); **E04D 2015/047** (2013.01 - EP US)

Cited by

DE4240605A1; EP3181769A1

Designated contracting state (EPC)

BE DE FR LU NL SE

DOCDB simple family (publication)

WO 8805487 A1 19880728; AU 1224088 A 19880810; CA 1290600 C 19911015; DK 159833 B 19901210; DK 159833 C 19910506; DK 520888 A 19880919; DK 520888 D0 19880919; EP 0302909 A1 19890215; EP 0302909 B1 19910619; FI 87678 B 19921030; FI 87678 C 19930210; FI 884312 A0 19880920; FI 884312 A 19880920; US 5066181 A 19911119

DOCDB simple family (application)

EP 8800020 W 19880113; AU 1224088 A 19880113; CA 556968 A 19880120; DK 520888 A 19880919; EP 88901240 A 19880113; FI 884312 A 19880920; US 27405888 A 19880921