

Title (en)
FASTENER FOR CORRUGATED SHEETING

Title (de)
BEFESTIGUNGSELEMENT FÜR GEWELLTE DACHEINDECKUNGEN

Title (fr)
FIXATION POUR TOLE ONDULEE

Publication
EP 0922147 A1 19990616 (EN)

Application
EP 97939013 A 19970829

Priority
• GB 9702357 W 19970829
• GB 9617992 A 19960829

Abstract (en)
[origin: WO9809036A1] A fastener (10) for securing corrugated sheeting (40) to a structural support (42). The fastener comprises a spacer (18), a washer (14) and a fixing (16). The spacer comprises a body in the form of a cylindrical sleeve (18). The sleeve has a slit along its length and is castellated around its upper and lower ends to form teeth (22) which are separated by intervening notches (23). As the fixing is tightened it engages with the upper end of the spacer (12). As the fixing is tightened further the spacer partially collapses to prevent stripping of the thread in the supporting structure. This allows for the reaction time of the operator of the tightening means by letting the fixing move into the supporting structure while the fixing is decelerating. The castellations at the lower end of the spacer also act as cutting teeth to cut through the corrugated sheeting.

IPC 1-7
E04D 3/36

IPC 8 full level
E04D 3/36 (2006.01); **F16B 5/00** (2006.01); **F16B 13/12** (2006.01); **F16B 13/13** (2006.01); **F16B 15/00** (2006.01); **F16B 43/02** (2006.01)

CPC (source: EP KR)
E04D 3/36 (2013.01 - KR); **E04D 3/3606** (2013.01 - EP)

Citation (search report)
See references of WO 9809036A1

Designated contracting state (EPC)
AT BE DE DK ES FI FR GB GR IE IT LU NL PT SE

DOCDB simple family (publication)
WO 9809036 A1 19980305; AT E213045 T1 20020215; AU 4124597 A 19980319; AU 728031 B2 20010104; CN 1228823 A 19990915; DE 69710342 D1 20020321; DE 69710342 T2 20021010; DK 0922147 T3 20020527; EP 0922147 A1 19990616; EP 0922147 B1 20020206; ES 2172810 T3 20021001; GB 2317429 A 19980325; GB 2317429 B 20001011; GB 9617992 D0 19961009; JP 2000517012 A 20001219; KR 20000035902 A 20000626; NZ 334284 A 20010126; PT 922147 E 20020731

DOCDB simple family (application)
GB 9702357 W 19970829; AT 97939013 T 19970829; AU 4124597 A 19970829; CN 97197511 A 19970829; DE 69710342 T 19970829; DK 97939013 T 19970829; EP 97939013 A 19970829; ES 97939013 T 19970829; GB 9617992 A 19960829; JP 51140798 A 19970829; KR 19997001626 A 19990227; NZ 33428497 A 19970829; PT 97939013 T 19970829