

Title (en)  
IMPROVED COUPLERS

Publication  
**EP 0344199 A4 19901205 (EN)**

Application  
**EP 88901772 A 19880217**

Priority  
AU PI040487 A 19870217

Abstract (en)  
[origin: WO8806222A1] The coupler (100) comprises a pair of U-shaped support members (112) having pivoted thereto an inverted U-shaped saddle (120). The support members (112) and saddle (120) intersect at (128) in a clamping condition to clamp a tube (124) in the coupler and outwardly extending arms (130) and (132) of the support members and saddle respectively may be urged apart by a wedging device (134) to provide the clamping force. The wedging device (134) is a toggle joint which in the undercentre condition (160) illustrated wedging engages the arm (132) which projects through an opening (146) in a locking arm (144). The arm (132) is radiused about an outwardly offset axis (152) relative to the pivot axis (137) of toggle joint (134). The toggle joint may be moved to an overcentre condition (162) in which the opposed edges of the opening (146) lockingly engage the upper and lower surface (150) and (151) of the arm (132), which may be serrated as at (148). The coupler (100) may be interlocked with a second identical coupler (100').

IPC 1-7  
**E04G 7/12**; **E04G 7/14**; **E04G 7/18**

IPC 8 full level  
**E04G 7/12** (2006.01); **E04G 7/14** (2006.01); **E04G 7/18** (2006.01); **F16B 2/18** (2006.01); **F16B 2/20** (2006.01); **F16B 7/04** (2006.01)

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Citation (search report)

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- [X] NL 7811721 A 19800602 - MULDER RUDOLF
- [A] DE 908295 C 19540405 - PETER WEYER
- [A] US 4388747 A 19830621 - PLUMMER WALTER A [US]
- [A] US 2896293 A 19590728 - LOVE LESLIE G
- [A] FR 1303626 A 19620914
- See references of WO 8806222A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

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**WO 8806222 A1 19880825**; AU 1344788 A 19880914; AU 610572 B2 19910523; EP 0344199 A1 19891206; EP 0344199 A4 19901205; IN 169592 B 19911116; JP H02502204 A 19900719; KR 890700727 A 19890427

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**AU 8800044 W 19880217**; AU 1344788 A 19880217; EP 88901772 A 19880217; IN 407CA1988 A 19880523; JP 50178588 A 19880217; KR 880701305 A 19881017