

Title (en)
FASTENING DEVICE FOR RAILS

Title (de)
BEFESTIGUNGSVORRICHTUNG FÜR SCHIENEN

Title (fr)
DISPOSITIF DE FIXATION POUR RAILS

Publication
EP 1246970 A1 20021009 (DE)

Application
EP 01942392 A 20010111

Priority

- EP 01942392 A 20010111
- EP 0100301 W 20010111
- EP 00100206 A 20000114

Abstract (en)
[origin: EP1116827A1] The clamp (10) is made of spring steel and has a middle part (14) with two inner bars (12) and a loop (16), which is closed by the inner bar and curves to form a free end of the clamp. The free space between the middle part and the loop in the area of the free end of the loop is less than the diameter of the spring steel in the area of the free end. A thickened or compressed part may be formed at the free end.

IPC 1-7
E01B 9/48; **E01B 29/24**

IPC 8 full level
E01B 9/48 (2006.01); **E01B 29/24** (2006.01)

CPC (source: EP)
E01B 9/303 (2013.01); **E01B 9/483** (2013.01); **E01B 29/24** (2013.01)

Cited by
DE102010013055A1; EP2204494A1; EP2553172A2

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

DOCDB simple family (publication)
EP 1116827 A1 20010718; AR 031090 A1 20030910; AT E313661 T1 20060115; AU 2846701 A 20010724; CO 5300471 A1 20030731; CY 1105260 T1 20100303; CZ 298004 B6 20070523; DE 50108457 D1 20060126; DK 1246970 T3 20060418; EP 1246970 A1 20021009; EP 1246970 B1 20051221; ES 2255558 T3 20060701; HR P20020668 A2 20050228; HR P20020668 B1 20091130; HU 229125 B1 20130828; HU P0204220 A2 20030428; IL 150599 A0 20030212; IL 150599 A 20080413; NO 20023366 D0 20020712; NO 20023366 L 20020911; NO 322980 B1 20061218; PE 20010823 A1 20010814; PL 209111 B1 20110729; PL 356273 A1 20040628; RS 49978 B 20080929; SK 10302002 A3 20030204; SK 286529 B6 20081205; WO 0151711 A1 20010719; YU 53602 A 20040903

DOCDB simple family (application)
EP 00100206 A 20000114; AR P010100163 A 20010112; AT 01942392 T 20010111; AU 2846701 A 20010111; CO 01002068 A 20010112; CY 061100384 T 20060320; CZ 20022408 A 20010111; DE 50108457 T 20010111; DK 01942392 T 20010111; EP 0100301 W 20010111; EP 01942392 A 20010111; ES 01942392 T 20010111; HR P20020668 A 20020813; HU P0204220 A 20010111; IL 15059901 A 20010111; IL 15059902 A 20020704; NO 20023366 A 20020712; PE 2001000028 A 20010112; PL 35627301 A 20010111; SK 10302002 A 20010111; YU P53602 A 20010111