

Title (en)  
Fastening device under floors for the supporting post of balustrades

Title (de)  
Befestigungsvorrichtung am Deckenunterbau für tragende Geländerfosten

Title (fr)  
Dispositif de fixation sous dalle pour barreau-support de garde-corps

Publication  
**EP 0731236 B1 19990804 (FR)**

Application  
**EP 96420058 A 19960222**

Priority  
FR 9503160 A 19950310

Abstract (en)  
[origin: EP0731236A1] A guard rail support bar (4) is fixed under a slab (1) by a fixing section (14) under the slab. The section upper part (17) is applied under the slab lower surface (18) and fixed there by a screw (25). When the support bar is vertical the front end of the section is at the slab head (2). An end piece (15) which is mounted at the fixing section front end has a convex external surface (29). A shoe (16) having a concave base, complementary to the end piece convex surface, has an upper part (31) which fits into and fixes the support bar base. A bolt and washer (32,33) fix the shoe through its concave base against the end piece. In the case of an inclined support bar, particularly when a gutter must be placed in front of the slab head, the fixing section is positioned so that its front end, and consequently the end piece, are located in front of the slab head.

IPC 1-7  
**E04F 11/18; E04B 1/00**

IPC 8 full level  
**E04B 1/00** (2006.01); **E04F 11/18** (2006.01)

CPC (source: EP)  
**E04B 1/003** (2013.01); **E04F 11/1812** (2013.01)

Cited by  
DE102015001891A1; EP0864707A3; DE102015001891B4; EP3056632A1; EP3812531A1

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