

Title (en)  
Elbowed support plates for elastic fastening of rails on concrete ties

Title (de)  
Winkelförmigen Führungsplatten für elastische Schienenklemmen an Betonschwellen

Title (fr)  
Plaques de support coudées pour attaches élastiques de rails sur traverses en béton

Publication  
**EP 0767274 B1 20041103 (EN)**

Application  
**EP 96500128 A 19960923**

Priority  
ES 9501841 A 19950922

Abstract (en)  
[origin: EP0767274A1] This type of fastenings currently use five versions of elbowed plates, depending on whether the monoblock ties are for single rail tracks with profile UIC-54 or UIC-60, or for versatile ties for doble width tracks and rails UIC-54 and UIC-60, as well as having, in these latter cases, to be assembled in the interior or exterior of the rail. On these plates abut the respective cramp or elastic clip which fastens the shoe by means of the suitable screw threaded to the rail. All these plates are lightened advantageously, forming at the bottom ten transversal webs and with the central hole (11), reinforced with a circular web (with the exception of the elbowed end guide). All the plates have shorter preassembly supports for the clip (5), and the internal zone is circular, as well as having the notch with toroidal shape with greater size, which makes optimum the coupling of the central loop of the clip (5). <IMAGE>

IPC 1-7  
**E01B 9/30**

IPC 8 full level  
**E01B 9/30** (2006.01)

CPC (source: EP)  
**E01B 9/303** (2013.01)

Cited by  
CN112105777A; DE10233784A1; DE10233784B4; KR20160102393A; CN106062277A; JP2016537531A; AU2014336365B2; EP1950347A2; US10174459B2; US7156319B2; WO2004048697A1; WO2015055540A1

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**EP 0767274 A1 19970409; EP 0767274 B1 20041103**; AT E281560 T1 20041115; DE 69633764 D1 20041209; ES 2119656 A1 19981001; ES 2119656 B1 19990516; ES 2232834 T3 20050601

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