

Title (en)
Element for fastening a rail to a concrete railway sleeper.

Title (de)
Element zum Befestigen einer Schiene auf einer Betonschwelle.

Title (fr)
Élément pour la fixation d'un rail sur une traverse en béton.

Publication
EP 0126835 A1 19841205 (FR)

Application
EP 83870094 A 19830921

Priority
BE 210881 A 19830531

Abstract (en)
1. A metal element (1) for securing a rail to a concrete sleeper (4) by means of a sleeper clip (3) having the shape of a spring double loop, this element comprising a portion (5) arranged in projection with respect to the sleeper (4) and intended to cooperate with the base (6) of the rail and the sleeper clip (3), and two anchoring lugs (7 and 8) arranged on both sides of the projecting portion (5), these lugs being substantially parallel to the rail (2) and intended to be embedded in the sleeper concrete in order to secure the element (1) against motion with respect to said sleeper, the projecting portion (5) comprising a vertical surface (9) which is parallel to the rail (2) and forms a shoulder for one of the edges (10) of the rail base (6), a socket (12) having a cylindrical portion (13) the axis of which extends in a parallel direction to the rail and in which one of the ends of the sleeper clip (3), of a substantially circular cross-section, is set in position, and a substantially horizontal holding area (15) for the other end of the sleeper clip, the socket (12) being formed between the vertical surface (9) and the holding area (15), the end of the sleeper clip bearing in this socket (12) on the face of the latter which is turned towards the sleeper (4) while the other end of the sleeper clip (3) bears in the holding area (15) on the face of the element which is opposite to the sleeper, this element (1) being characterized in that it comprises, on the one hand, at least two pieces (18 and 19) each made from a metal flat, such as soft steel, a first piece (18) being shaped to comprise the vertical surface (9) intended to form the above-mentioned shoulder, the anchoring lug (7) which is the nearest to the rail (2) and is located in the extension of the vertical surface (9), the cylindrical portion (13) forming the socket of one of the ends of the sleeper clip (3) and the substantially horizontal holding area (15) for the other end of the sleeper clip, and a second piece (19) being shaped to comprise the anchoring lug (8) of the element which is the farthest off the rail, this second piece (19) being united to the first piece (18) by welding to the face (20) of the latter which is turned towards the sleeper and along the free edge (21) of the substantially horizontal holding area (15), which is parallel to the rail (2) and, on the other hand, means arranged to centre the element (1) into a casting mould for the sleeper and to prohibit concrete to be admitted into the socket (12) of the element (1) when concrete is cast, said means comprising a metal plate (28) extending in a horizontal direction between the internal faces of both pieces (18, 19) and being fixed by welding to the latter.

Abstract (fr)
Élément (1) réalisé en au moins deux pièces (18) et (19) formées chacune à partir d'un plat, la pièce (18) étant profilée pour présenter une face verticale (9) constituant l'épaule du patin (6) du rail, une patte d'ancrage (7), une portion cylindrique (13) formant un logement (12) pour l'extrémité (14) d'un crapaud à ressort (3) et une zone de support horizontale (15) pour l'extrémité (16) du crapaud, la pièce (19) comprenant la seconde patte d'ancrage (8) de l'élément, les pièces (18) et (19) étant réunies par soudure le long du bord libre (21) de la zone de support (15).

IPC 1-7
E01B 9/30

IPC 8 full level
E01B 9/30 (2006.01)

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

Citation (search report)
• GB 1278388 A 19720621 - PANDROL LTD [GB]
• GB 1596002 A 19810819 - PANDROL LTD
• GB 1059190 A 19670215 - LOCKSPIKE LTD
• FR 2505379 A1 19821112 - SONNEVILLE ROGER [US]
• DE 1938281 B1 19700730 - HOLLITZER BAUSTOFFWERKE

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

DOCDB simple family (publication)
EP 0126835 A1 19841205; EP 0126835 B1 19881123; AT E38865 T1 19881215; DE 3378540 D1 19881229

DOCDB simple family (application)
EP 83870094 A 19830921; AT 83870094 T 19830921; DE 3378540 T 19830921