

Title (en)
SPRING ROD-SHAPED CLIP FASTENER FOR RAIL FASTENING

Title (de)
FEDERSTABFÖRMIGER CLIP-BEFESTIGER ZUR SCHIENENBEFESTIGUNG

Title (fr)
ATTACHE EN FORME DE TIGE DE RESSORT POUR FIXATION DE RAIL

Publication
EP 4368775 A1 20240515 (EN)

Application
EP 23020340 A 20230706

Priority
EA 202292889 A 20221108

Abstract (en)
The invention relates to a design of a track structure for railways, namely to a design of a spring rod-shaped clip fastener for a use in intermediate rail fastenings for pressing a rail against a rail support. The spring rod-shaped clip fastener for a rail fastening is made of a resilient rod bent to form a single B-shaped part in the projection onto a horizontal plane, which is symmetrical relative to the transverse axis and consists of sections radially mated therebetween in the projection onto a horizontal plane, said sections comprising a section of resting on a rail, which is rectilinear in the projection onto a horizontal plane and changes on two opposite sides along rounding radii into side sections located perpendicularly to a track centerline and being rectilinear in the projection onto a horizontal plane, said side sections change into radial, in the projection onto a horizontal plane, sections of resting on a thrust member of the rail fastening, which change into end sections directed with their ends towards the section of resting on the rail and rectilinear in the projection onto a horizontal plane; the section of resting on the rail is made, in its longitudinal profile, convex radially with two edge points of resting on the rail; the sections of resting on the thrust member of the rail fastening are made radially concave in their longitudinal profile, and the side sections and the end sections are made radially convex in their transverse profile; and a value of an inner radius of the side sections in the transverse profile of the clip fastener is less than a value of an inner radius of the end sections. The technical effect is a higher stability of a force of pressing a rail against a rail support provided by the spring rod-shaped clip fastener due to its designed having complex spatial geometry, which reduces its stiffness, while maintaining its pressing force, due to an increased resilient motion of the clip fastener, and, simultaneously, provides the possibility of reducing stress concentration and raise the efficiency of using the material of the clip fastener owing to making a greater length of the rod operable.

IPC 8 full level
E01B 9/30 (2006.01)

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

Citation (applicant)

- RU 2767807 C1 20220322 - MISHUNIN VYACHESLAV MIKHAILOVICH [RU]
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Citation (search report)

- [AD] RU 174600 U1 20171023
- [AD] RU 170573 U1 20170428
- [A] DE 2740144 A1 19790315 - PORTEC INC

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