

Title (en)
SAFETY LOOP SYSTEM AND RAILWAY VEHICLE

Title (de)
SICHERHEITSSCHLEIFENSYSTEM UND SCHIENENFAHRZEUG

Title (fr)
SYSTÈME DE BOUCLE DE SÉCURITÉ ET VÉHICULE FERROVIAIRE

Publication
EP 4163182 A4 20240403 (EN)

Application
EP 20939667 A 20200804

Priority
• CN 2020106680 W 20200804
• CN 202010518995 A 20200609

Abstract (en)
[origin: EP4163182A1] The embodiment of the present disclosure provides a safety loop system and a railway vehicle, which are used to overcome the problem of low safety of the train operation caused by the identifying difficulty of a car fault through the safety loop after the safety loop of the whole train is removed. The safety loop system includes: a first bypass switch disposed in the end car and a second bypass switch disposed in at least one of the plurality of cars respectively, wherein the first bypass switch and the second bypass switch both have bypass positions, in a case where the bypass positions of the first bypass switch and the second bypass switch are both in an off-state, the first bypass switch and the second bypass switch are configured to conduct the safety loop of the whole train, and in a case where the bypass position of the second bypass switch of a target car is switched to an on-state, the second bypass switch of the target car is configured to conduct a train main line and a train status line of the safety loop system, so as to be able to conduct a partial safety loop.

IPC 8 full level
B61L 15/00 (2006.01)

CPC (source: CN EP)
B61L 15/0036 (2013.01 - EP); **B61L 15/0054** (2013.01 - CN); **B61L 15/0072** (2013.01 - EP); **B61L 15/0081** (2013.01 - CN EP)

Citation (search report)
• [A] CN 108791259 A 20181113 - CRRRC QINGDAO SIFANG CO LTD
• [A] US 9994241 B2 20180612 - FISCHER HARALD [DE]
• [A] CN 110816505 A 20200221 - CRRRC NANJING PUZHEN CO LTD
• See also references of WO 2021248664A1

Designated contracting state (EPC)
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EP 4163182 A1 20230412; **EP 4163182 A4 20240403**; CN 111731343 A 20201002; CN 111731343 B 20211019; WO 2021248664 A1 20211216

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