

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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DOCDB simple family (publication)  
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