

Title (en)  
SUPPLEMENTAL ENERGY GENERATION AND STORAGE FOR TRAINS

Title (de)  
ZUSÄTZLICHE ENERGIEERZEUGUNG UND SPEICHERUNG FÜR ZÜGE

Title (fr)  
GÉNÉRATION ET STOCKAGE D'ÉNERGIE SUPPLÉMENTAIRE POUR DES TRAINS

Publication  
**EP 4149789 A4 20240529 (EN)**

Application  
**EP 20935878 A 20200903**

Priority  
• US 202063024888 P 20200514  
• US 2020049251 W 20200903

Abstract (en)  
[origin: WO2021230898A1] The invention relates to the supplemental generation of energy from operation of a train, and specifically to the generation of energy in connection to the rotation of disc brake rotors in combination with generators. Rotation of the disc brake rotors creates rotational energy that is transmitted to the generators, which then transmits the energy to a series of batteries for storage. The batteries may be stored in the platform for the train and/or within the train car itself. Energy from the batteries may be utilized by removal of the batteries from the train or through a number of outlets, sockets or connectors associated with the train car or platform.

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Citation (search report)  
• [I] US 4285279 A 19810825 - CHIAPPETTI ARTHUR B  
• [XII] WO 2020069737 A1 20200409 - SCHWEIZERISCHE BUNDESBAHNEN SBB [CH]  
• See also references of WO 2021230898A1

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**WO 2021230898 A1 20211118**; AU 2020447972 A1 20221208; BR 112022023062 A2 20230307; CA 3177128 A1 20211118; CA 3177128 C 20240507; CN 115605369 A 20230113; EP 4149789 A1 20230322; EP 4149789 A4 20240529; GB 202214929 D0 20221123; GB 2608565 A 20230104; JP 2023525341 A 20230615; JP 7492609 B2 20240529; KR 20230013249 A 20230126; MX 2022014221 A 20230119; WO 2021230899 A1 20211118; ZA 202210423 B 20240530

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