

Title (en)

METHOD AND SYSTEM FOR PRECONDITIONING PARTS OF A RAILWAY VEHICLE, AND RELATED RAILWAY VEHICLE

Title (de)

VERFAHREN UND SYSTEM ZUR VORKONDITIONIERUNG VON TEILEN EINES SCHIENENFAHRZEUGS UND ZUGEHÖRIGES SCHIENENFAHRZEUG

Title (fr)

PROCÉDÉ ET SYSTÈME POUR PIÈCES DE PRÉCONDITIONNEMENT D'UN VÉHICULE FERROVIAIRE ET VÉHICULE FERROVIAIRE ASSOCIÉ

Publication

EP 3822143 A1 20210519 (EN)

Application

EP 19306476 A 20191118

Priority

EP 19306476 A 20191118

Abstract (en)

Method (100) and system (200) for preconditioning parts of a railway vehicle (1) comprising an on-board power generation system (10), comprising at least:- (110): starting-up the railway vehicle (1) or at least parts thereof;- (120): connecting a power storage unit (20) to a power conversion system (30), said power storage unit (20) and said power conversion system (30) being installed on board of the railway vehicle (1);- (130): supplying at least part of the power conversion system (30) by discharging energy pre-stored in the power storage unit (20), the pre-stored energy being discharged with a level of power below a first predetermined power threshold;- (140): heating-up the power storage unit (20) via the power conversion system (30);- (150): starting pre-heating at least part of the power generation system (10) via the power conversion system (30);- (160): when the pre-heated at least part of the power generation system (10) reaches a predetermined start-up temperature, and advantageously the power storage unit (20) reaches a predetermined minimal charging temperature, starting-up power generation by the power generation system (10);- (170): when at least part of the power generation system (10) reaches a predetermined operating temperature, centralizing power sourcing of the railway vehicle (1) or parts thereof to the power generation system (10).

IPC 8 full level

B61C 3/00 (2006.01); **B61C 3/02** (2006.01); **B61C 7/04** (2006.01); **B61C 17/06** (2006.01); **B61D 27/00** (2006.01)

CPC (source: EP)

B61C 3/02 (2013.01); **B61C 7/04** (2013.01); **B61C 17/06** (2013.01); **B61D 27/00** (2013.01)

Citation (search report)

- [A] US 7137344 B2 20061121 - KUMAR AJITH KUTTANNAIR [US], et al
- [A] EP 2679418 A1 20140101 - PARASKA HOLDINGS LTD [CY]
- [A] US 2018297440 A1 20181018 - DESNEUX ALEXANDRE [FR], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3822143 A1 20210519; EP 3822143 B1 20220810; ES 2929178 T3 20221125; HR P20221342 T1 20221223; PL 3822143 T3 20230130

DOCDB simple family (application)

EP 19306476 A 20191118; ES 19306476 T 20191118; HR P20221342 T 20191118; PL 19306476 T 20191118