

Title (en)  
A POWER TRANSFER METHOD FOR USE IN RAIL TRANSPORT SYSTEMS

Title (de)  
ENERGIEÜBERTRAGUNGSVERFAHREN ZUR VERWENDUNG BEI SCHIENENTRANSPORTSYSTEMEN

Title (fr)  
PROCÉDÉ DE TRANSFERT DE PUISSANCE DESTINÉ À ÊTRE UTILISÉ DANS DES SYSTÈMES DE TRANSPORT FERROVIAIRE

Publication  
**EP 3903403 A4 20220309 (EN)**

Application  
**EP 19902368 A 20191213**

Priority  
• TR 201820812 A 20181227  
• TR 2019051076 W 20191213

Abstract (en)  
[origin: WO2020139247A1] The invention is a carrying beam (10) which enables applying the power transfer method to the rail system allowing the transfer of the energy required by the driving motor in the rail transport system in a safe manner, characterized in that; metal plates (14) which are located side by side with a gap (B) between them, create capacitive surface together with the rails (1,2) by means of being positioned on the left rail (1) and right rail (2) that have galvanic insulation with electrified surface by means of polarization with electric cables and enables power transfer, dielectric material plates (13) which is disposed between said metal plates (14) and rails (1, 2) and prevents short circuit formation by cutting the contact of the rails (1, 2) and the metal plates (14), pressure wheels (11) which is disposed on the lower surface of the carrying beam (10) and decreases the distance between the rails (1, 2) and the metal plates (14) which are the capacitive surfaces by means of applying pressure force on the metal plates (14), shaft (12) which enables attaching the pressure wheels (11) to the carrying beams (10), adjusting plate (18) which enables the gap (B) between the metal plate (14) and the rails (1, 2) which are the capacitive surfaces on the lower surface central section of the carrying beam (10).

IPC 8 full level  
**H02J 50/00** (2016.01); **B60M 7/00** (2006.01); **H02J 50/05** (2016.01); **H04B 5/00** (2006.01)

CPC (source: EP)  
**H02J 50/005** (2020.01); **H02J 50/05** (2016.02); **H04B 5/22** (2024.01); **H04B 5/79** (2024.01); **B60M 7/00** (2013.01)

Citation (search report)  
• [A] EP 0767095 A1 19970409 - NTL NEUE TRANSPORTLINIEN GMBH [DE], et al  
• [A] US 3806672 A 19740423 - LANDIS R  
• [A] WO 2018173308 A1 20180927 - PANASONIC IP MAN CO LTD [JP] & EP 3605791 A1 20200205 - PANASONIC IP MAN CO LTD [JP]  
• [A] US 7926634 B1 20110419 - MORALES MIGUEL ANGEL [US]  
• See references of WO 2020139247A1

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)  
**WO 2020139247 A1 20200702**; EP 3903403 A1 20211103; EP 3903403 A4 20220309; TR 201820812 A2 20190221

DOCDB simple family (application)  
**TR 2019051076 W 20191213**; EP 19902368 A 20191213; TR 201820812 A 20181227