

Title (en)

CURRENT COLLECTOR FOR AN ELECTRICALLY OR HYBRID ELECTRICALLY POWERED ROAD VEHICLE

Title (de)

STROMABNEHMER FÜR EIN ELEKTRISCH ODER HYBRIDELEKTRISCH ANGETRIEBENES STRASSENFAHRZEUG

Title (fr)

COLLECTEUR DE COURANT POUR VÉHICULE ROUTIER ÉLECTRIQUE OU HYBRIDE

Publication

EP 4313662 A1 20240207 (DE)

Application

EP 22738463 A 20220629

Priority

- DE 102021207821 A 20210721
- EP 2022067856 W 20220629

Abstract (en)

[origin: WO2023001511A1] The invention relates to a current collector (2) for an electrically powered vehicle (1) for feeding traction energy from a two-pole overhead line system. The current collector comprises an articulated support linkage (4), which, on the contact wire side, supports a rocker assembly (11) having at least one contact strip (12) per contact pole and, on the vehicle side, has a base joint (5) for support on the road vehicle (1). A lifting drive (22) is coupled to the support linkage (4) in such a way that the contact strips (12) can be lifted into an upper contact position. According to the invention the support linkage (4) is formed like a pantograph with a lower arm (6) and an upper arm (8) connected to the lower arm via an elbow joint (7). The rocker assembly (11) has a rocker frame (14) having an upper transverse beam (15) and a lower transverse beam (16) which are connected centrally by a centre strut (17) and on each end side by a lateral strut (18) on swivel joints (19). The upper arm (8) is connected on the contact wire side to the centre strut (17) via a rocker joint (20). The contact strips (12) of the two contact poles are supported on the rocker frame (14) symmetrically with respect to the centre strut (17). In this way a current collector (2) is provided by which, with a simpler construction, a consistent contact force can be achieved between contact strips (12) and contact wires (3) of the overhead line system.

IPC 8 full level

B60L 5/24 (2006.01); **B60L 5/19** (2006.01); **B60L 5/26** (2006.01); **B60L 5/28** (2006.01); **B60L 5/36** (2006.01)

CPC (source: EP)

B60L 5/19 (2013.01); **B60L 5/24** (2013.01); **B60L 5/26** (2013.01); **B60L 5/28** (2013.01); **B60L 5/36** (2013.01)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021207821 A1 20230126; CN 117500686 A 20240202; EP 4313662 A1 20240207; WO 2023001511 A1 20230126

DOCDB simple family (application)

DE 102021207821 A 20210721; CN 202280043558 A 20220629; EP 2022067856 W 20220629; EP 22738463 A 20220629