Title (en)

CHARGING SYSTEM FOR CHARGING AN ELECTRICAL ENERGY ACCUMULATOR OF A ROAD VEHICLE

Title (de)

LADESYSTEM ZUM AUFLADEN EINES ELEKTRISCHEN ENERGIESPEICHERS EINES STRASSENFAHRZEUGS

Title (fr)

SYSTÈME DE CHARGE PERMETTANT DE CHARGER UN ACCUMULATEUR D'ÉNERGIE ÉLECTRIQUE D'UN VÉHICULE ROUTIER

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2021058170A1] The invention relates to a charging system (4) for charging an electrical energy accumulator (2) of a road vehicle (1), which comprises a current consumer (8) having at least one contact strip (9) that can be lifted and lowered for creating electrical contact with a contact wire (7) of a contact pole (6P, 6N), in order to supply power from a two-pole overhead contact line system with one contact wire (7) per contact pole (6P, 6N). The charging system (4) comprises a charging station (3) having one charging contact (12) per contact pole (6P, 6N), which is arranged above the at least one contact strip (9) - assigned to said contact pole (6P, 6N) - of the road vehicle (1) located in a charging position, and having an earthing contact (13) which is arranged above and laterally spaced apart from the contact strips (9) of the road vehicle located in the charging position and is earthed via a protective conductor (17). The current consumer (8) has two detection contacts (15) which are insulated in relation to the contact strips (9) and in relation to an electrical earth potential (P16) of the vehicle frame (16) and connected to one another with high resistance, and which are bridged by the earthing contact (13) when there is contact closure between the contact strips (9) and the charging contacts (12). A bridging of the detection contacts (15) by the earthing contact (13) can be detected by means of a measuring device (22). One of the detection contacts (15) is detachably connected to the earth potential (P16) by an earth lead (24) having a switch element (23).

IPC 8 full level

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