

Title (en)

INPUT POWER CONTROL OF CHARGING STATION FOR ELECTRIC VEHICLES

Title (de)

EINGANGSLEISTUNGSSTEUERUNG EINER LADESTATION FÜR ELEKTROFAHRZEUGE

Title (fr)

COMMANDE DE PUISSANCE D'ENTRÉE D'UNE STATION DE CHARGE POUR VÉHICULES ÉLECTRIQUES

Publication

EP 3776798 A1 20210217 (EN)

Application

EP 19720385 A 20190405

Priority

- GB 201805714 A 20180405
- GB 201805713 A 20180405
- EP 2019058733 W 20190405

Abstract (en)

[origin: WO2019193188A1] Charging station for electric energy storages of electric vehicles comprising an input circuit for connecting the charging station to an electrical power source; an output circuit for connecting the charging station via charging plugs to the electric energy storages of electric vehicles; an electrical direct current charging buffer with a positive terminal and a negative terminal configured to be charged by the electrical power source; a n-phase transformer for galvanic isolation of the input circuit from the output circuit with primary windings (L'1, L'2, L'3) on the input circuit side and secondary windings (L"1, L"2, L"3) on the output circuit side; a sensor for sensing at least one of voltage or current consumed during charging the electrical operated vehicle providing a sensor signal that is indicative of the sensed voltage and/or current; the output circuit further comprising a switching circuit for periodically connecting the positive terminal of the charging buffer and the negative terminal of the charging buffer to the primary windings (L'1, L'2, L'3); control means for receiving the sensor signal and configured to control the switching circuit to provide a predetermined voltage and/or charging current.

IPC 8 full level

H02J 7/00 (2006.01)

CPC (source: EP US)

B60L 53/53 (2019.02 - EP); **H02J 7/00304** (2020.01 - EP US); **H02J 7/00308** (2020.01 - EP US); **H02J 7/34** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP); **Y02T 10/7072** (2013.01 - EP); **Y02T 90/12** (2013.01 - EP); **Y02T 90/14** (2013.01 - EP)

Citation (examination)

DE 102016103011 A1 20170824 - PORSCHE AG [DE]

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 2019193188 A1 20191010; EP 3776797 A1 20210217; EP 3776797 B1 20211222; EP 3776798 A1 20210217; WO 2019193195 A1 20191010

DOCDB simple family (application)

EP 2019058718 W 20190405; EP 19720384 A 20190405; EP 19720385 A 20190405; EP 2019058733 W 20190405