

Title (en)

CHARGING STATION FOR CHARGING ELECTRIC VEHICLES HAVING A CHARGING CAPACITY OF MORE THAN 100 KW

Title (de)

LADESTATION ZUM LADEN VON ELEKTROFAHRZEUGEN MIT EINER ELEKTRISCHEN LADELEISTUNG VON MEHR ALS 100 KW

Title (fr)

STATION DE CHARGE POUR CHARGER DES VÉHICULES ÉLECTRIQUES AYANT UNE CAPACITÉ DE CHARGE ÉLECTRIQUE SUPÉRIEURE À 100 KW

Publication

**EP 4247665 A1 20230927 (DE)**

Application

**EP 21847486 A 20211223**

Priority

- DE 102020216555 A 20201223
- EP 2021087560 W 20211223

Abstract (en)

[origin: WO2022136668A1] The invention relates to a charging station (1) for charging electric vehicles (2), in particular for charging electric road-vehicles (2), having an electrical charging capacity of more than 100 kW, comprising: a connection unit (3) for connecting the charging station (1) to an electrical supply infrastructure (6) and for supplying the charging station (1) with electrical current; a flywheel storage unit (4) for storing energy taken from the supply infrastructure (6) by the connection unit (3) in the form of electrical current; a coupling unit (5) for predominantly electrical coupling of the electric vehicle (2) to the flywheel storage unit (4), which coupling unit is designed to transfer an electrical power of more than 100 kW into the electric vehicle (2) by means of a direct charging voltage; the flywheel storage unit (4) being designed to store energy at the level of a predefined energy amount which is greater than 5 kWh; and to provide the stored energy at an electrical power of a predefined power amount to the coupling unit (5) and thus the electric vehicle (2), which is greater than 100 kW; wherein the ratio between energy amount and power amount is no greater than 0.25 hours, in order to provide a charging station (1) for charging electric vehicles (2) having a charging capacity of more than 100 kW, which station places low demands on a supply infrastructure (6) and is as unsusceptible to faults as possible.

IPC 8 full level

**B60L 53/56** (2019.01); **B60L 53/10** (2019.01); **B60L 53/30** (2019.01); **B60L 53/62** (2019.01); **B60L 58/12** (2019.01)

CPC (source: EP)

**B60L 53/11** (2019.01); **B60L 53/32** (2019.01); **B60L 53/56** (2019.01); **B60L 53/62** (2019.01); **B60L 58/12** (2019.01); **Y02T 10/70** (2013.01); **Y02T 10/7072** (2013.01); **Y02T 90/12** (2013.01); **Y02T 90/14** (2013.01)

Citation (search report)

See references of WO 2022136668A1

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)

**WO 2022136668 A1 20220630**; DE 102020216555 A1 20220623; EP 4247665 A1 20230927

DOCDB simple family (application)

**EP 2021087560 W 20211223**; DE 102020216555 A 20201223; EP 21847486 A 20211223