

Title (en)

CHARGING DEVICE AND METHOD FOR ELECTRICALLY CHARGING AN ELECTRIC VEHICLE

Title (de)

LADDEINRICHTUNG UND VERFAHREN ZUM ELEKTRISCHEN LADEN EINES ELEKTROFAHRZEUGES

Title (fr)

SYSTÈME ET PROCÉDÉ DE CHARGE POUR LA CHARGE ÉLECTRIQUE D'UN VÉHICULE ÉLECTRIQUE

Publication

EP 4244094 A1 20230920 (DE)

Application

EP 21806960 A 20211110

Priority

- AT 509682020 A 20201110
- AT 2021060427 W 20211110

Abstract (en)

[origin: WO2022099342A1] The invention relates to a charging device (1) for electrically charging an electric vehicle. The charging device (1) has a first coupling element (2), which can be connected to a second coupling element on the electric vehicle in order to establish an electrical connection. According to the invention, in order to make the charging device robust and less susceptible to soiling, the charging device (1) has a base (4), which can be at least partly sunk into the ground, and a moving device (6), which connects the first coupling element to the base (4) such that the first coupling element can be controllably moved relative to the base (4), the base (4) having a through-opening (5) and a cover (7), which closes the through-opening (5), so that, in the usage state, with the cover (7) open, the first coupling element (2) can be moved by means of the moving device (6) from a non-charging position, in which the first coupling element is sunk in the ground, through the through-opening (5) in order to lead the first coupling element (2) to assume a charging position with respect to the second coupling element. The invention also relates to a method for electrically charging an electric vehicle by means of a charging device (1) of this type.

IPC 8 full level

B60L 53/14 (2019.01); **B60L 53/16** (2019.01); **B60L 53/35** (2019.01)

CPC (source: AT EP US)

B60L 53/14 (2019.02 - EP); **B60L 53/16** (2019.02 - AT EP US); **B60L 53/35** (2019.02 - AT 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)

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 2022099342 A1 20220519; AT 524344 A1 20220515; CN 116685493 A 20230901; EP 4244094 A1 20230920; US 2024017633 A1 20240118

DOCDB simple family (application)

AT 2021060427 W 20211110; AT 509682020 A 20201110; CN 202180089732 A 20211110; EP 21806960 A 20211110; US 202118036032 A 20211110