

Title (en)
GROUND CONTACT UNIT

Title (de)
BODENKONTAKTEINHEIT

Title (fr)
UNITÉ DE CONTACT AU SOL

Publication
EP 4334158 A1 20240313 (DE)

Application
EP 22727290 A 20220503

Priority
• DE 102021111481 A 20210504
• EP 2022061867 W 20220503

Abstract (en)
[origin: WO2022233881A1] The invention relates to a ground contact unit (10) for a vehicle battery charging system for automatic, conductive connection to a vehicle contact unit. The ground contact unit (10) has a plate-like main body (12), at least one potential level (18) and a plurality of contact regions (16) which are arranged on an exposed charging area (14) of the main body (12) with which the vehicle contact unit can come into contact and are associated with the at least one potential level (18). At least one protective assembly is associated with the contact regions (16) of the at least one potential level (18). The at least one protective assembly has a current measuring unit, which is provided in the current path, for measuring current and a switch, which is arranged in the current path and is controlled, amongst other things, depending on the result of the current measuring unit.

IPC 8 full level
B60L 3/00 (2019.01); **B60L 3/04** (2006.01); **B60L 3/12** (2006.01); **B60L 53/14** (2019.01); **B60L 53/16** (2019.01); **B60L 53/35** (2019.01);
B60L 53/36 (2019.01); **B60L 53/62** (2019.01); **H01R 13/22** (2006.01); **H02J 7/00** (2006.01)

CPC (source: EP KR US)
B60L 3/0069 (2013.01 - EP KR); **B60L 3/04** (2013.01 - EP KR); **B60L 3/12** (2013.01 - EP); **B60L 53/14** (2019.01 - EP);
B60L 53/16 (2019.01 - EP KR US); **B60L 53/35** (2019.01 - EP US); **B60L 53/36** (2019.01 - EP KR); **B60L 53/60** (2019.01 - US);
B60L 53/62 (2019.01 - EP KR); **H02J 7/00304** (2020.01 - US); **Y02T 10/70** (2013.01 - EP); **Y02T 10/7072** (2013.01 - EP);
Y02T 90/12 (2013.01 - KR); **Y02T 90/14** (2013.01 - KR)

Citation (search report)
See references of WO 2022233881A1

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 102021111481 A1 20221110; CN 117460640 A 20240126; EP 4334158 A1 20240313; KR 20240004545 A 20240111;
US 2024217355 A1 20240704; WO 2022233881 A1 20221110

DOCDB simple family (application)
DE 102021111481 A 20210504; CN 202280040032 A 20220503; EP 2022061867 W 20220503; EP 22727290 A 20220503;
KR 20237039674 A 20220503; US 202218558799 A 20220503