

Title (en)  
METHOD AND CHARGING SYSTEM FOR CHARGING AN ELECTRICAL STORED ENERGY SOURCE OF AN ELECTRICALLY DRIVEN VEHICLE

Title (de)  
VERFAHREN UND LADESYSTEM ZUM LADEN EINES ELEKTRISCHEN ENERGIESPEICHERS EINES ELEKTRISCH ANGETRIEBENEN FAHRZEUGS

Title (fr)  
PROCÉDÉ ET SYSTÈME DE CHARGE POUR CHARGER UNE SOURCE D'ÉNERGIE STOCKÉE ÉLECTRIQUE D'UN VÉHICULE ÉLECTRIQUE

Publication  
**EP 4263273 A1 20231025 (DE)**

Application  
**EP 21839149 A 20211215**

Priority  
• DE 102020007867 A 20201221  
• EP 2021085823 W 20211215

Abstract (en)  
[origin: WO2022136044A1] The invention relates to a method for charging a stored energy source (4) of a vehicle (3), wherein - a charging process of the stored energy source (4) is carried out using a charging device (6) of the vehicle (3), - in a first phase of the charging process, the stored energy source (4) is charged with a first DC voltage (U1) of the charging source (2) in accordance with a charging current (IL) of the charging source (2), - a battery voltage (UBatt) of the stored energy source (4) is determined during the charging process (6), - the battery voltage (UBatt) of the stored energy source (4) is compared with the charging voltage of the charging source (2), - a voltage converter (7) is operated in accordance with the comparison of the battery voltage (UBatt) with the charging voltage, wherein - in a second phase of the charging process following the first phase, the stored energy source (4) is charged with a second DC voltage (U2) of the voltage converter (7) in accordance with a choke current (ID) of the voltage converter (7). The invention also relates to a charging system (1).

IPC 8 full level  
**B60L 53/22** (2019.01); **B60L 53/10** (2019.01); **B60L 53/14** (2019.01); **B60L 53/66** (2019.01); **B60L 58/10** (2019.01); **H02M 1/10** (2006.01)

CPC (source: EP KR US)  
**B60L 53/11** (2019.02 - EP KR); **B60L 53/14** (2019.02 - EP KR); **B60L 53/16** (2019.02 - US); **B60L 53/22** (2019.02 - EP KR); **B60L 53/62** (2019.02 - US); **B60L 53/66** (2019.02 - EP KR); **B60L 58/10** (2019.02 - EP KR); **H02J 7/007182** (2020.01 - EP KR); **H02M 1/0009** (2021.05 - KR); **H02M 1/007** (2021.05 - EP KR); **H02M 1/10** (2013.01 - EP KR); **H02M 1/32** (2013.01 - KR); **H02M 3/156** (2013.01 - EP KR); **B60L 2210/10** (2013.01 - US); **B60L 2210/14** (2013.01 - EP KR); **B60L 2240/527** (2013.01 - EP KR); **B60L 2240/529** (2013.01 - EP KR US); **B60L 2240/547** (2013.01 - EP KR US); **B60L 2240/549** (2013.01 - EP KR US); **B60L 2270/20** (2013.01 - EP KR); **B60Y 2200/91** (2013.01 - KR); **H02J 2207/20** (2020.01 - EP); **H02J 2310/48** (2020.01 - EP KR); **H02M 1/0009** (2021.05 - EP); **H02M 1/32** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP KR); **Y02T 10/7072** (2013.01 - EP KR); **Y02T 10/72** (2013.01 - EP KR); **Y02T 90/12** (2013.01 - EP KR); **Y02T 90/14** (2013.01 - EP KR); **Y02T 90/16** (2013.01 - EP KR)

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 2022136044 A1 20220630**; CN 116802078 A 20230922; DE 102020007867 A1 20220623; EP 4263273 A1 20231025; JP 2023554381 A 20231227; KR 20230104982 A 20230711; US 2024100982 A1 20240328

DOCDB simple family (application)  
**EP 2021085823 W 20211215**; CN 202180086172 A 20211215; DE 102020007867 A 20201221; EP 21839149 A 20211215; JP 2023536347 A 20211215; KR 20237020705 A 20211215; US 202118258109 A 20211215