

Title (en)
AN ELECTRIC VEHICLE DC-DC BOOST CONVERTER

Title (de)
BOOST-GLEICHSPANNUNGSWANDLER FÜR ELEKTROFAHRZEUG

Title (fr)
CONVERTISSEUR ÉLÉVATEUR COURANT CONTINU-COURANT CONTINU DE VÉHICULE ÉLECTRIQUE

Publication
EP 3983256 A4 20230315 (EN)

Application
EP 20822115 A 20200612

Priority
• AU 2019902046 A 20190612
• AU 2020050599 W 20200612

Abstract (en)
[origin: WO2020248023A1] Apparatus and method for charging an electric vehicle. A controller in a reconfigured second state for charging the electric vehicle, selectively couples at least one of the vehicle's charging port terminals to at least one of the connection points of the at least two drive circuits of the motor of the electric vehicle. The controller also controls at least one of the other of the at least two drive circuits to allow at least one of an inductive winding in a drive circuit to be energised to regulate at least one of a charging current or a charging voltage to a DC energy source such as a traction battery of the electric vehicle.

IPC 8 full level
B60L 50/50 (2019.01); **B60L 50/60** (2019.01); **B60L 53/10** (2019.01); **H02J 7/00** (2006.01); **H02M 3/155** (2006.01); **H02M 3/158** (2006.01)

CPC (source: AU EP KR)
B60L 50/60 (2019.01 - EP KR); **B60L 53/12** (2019.01 - KR); **B60L 53/122** (2019.01 - AU); **B60L 53/22** (2019.01 - EP); **B60L 53/24** (2019.01 - EP KR); **H02J 7/007** (2013.01 - EP KR); **H02J 7/2434** (2020.01 - AU KR); **H02J 50/10** (2016.02 - AU KR); **H02M 1/0095** (2021.05 - EP); **H02M 1/10** (2013.01 - EP); **H02M 3/158** (2013.01 - KR); **H02M 3/1584** (2013.01 - AU KR); **H02M 7/53871** (2013.01 - KR); **B60L 2210/14** (2013.01 - AU KR); **B60Y 2200/91** (2013.01 - KR); **H02J 7/14** (2013.01 - EP); **H02J 7/2437** (2020.01 - AU); **H02J 2207/20** (2020.01 - EP KR); **H02J 2310/48** (2020.01 - AU EP KR); **H02M 3/158** (2013.01 - EP); **H02M 7/53871** (2013.01 - EP); **Y02T 10/70** (2013.01 - KR); **Y02T 10/7072** (2013.01 - KR)

Citation (search report)
• [I] US 2007029986 A1 20070208 - NAKAMURA MAKOTO [JP], et al
• [I] US 2011050173 A1 20110303 - KING ROBERT DEAN [US], et al
• [I] EP 3316470 A1 20180502 - NISSAN MOTOR [JP]
• [A] EP 2572923 A2 20130327 - HITACHI LTD [JP]
• [A] WO 2011108925 A2 20110909 - EPYON B V [NL], et al
• [A] EP 2875984 A2 20150527 - GEN ELECTRIC [US]
• [A] JP H06133564 A 19940513 - TOSHIBA F A SYSTEM ENG, et al
• See references of WO 2020248023A1

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

DOCDB simple family (publication)
WO 2020248023 A1 20201217; EP 3983256 A1 20220420; EP 3983256 A4 20230315; KR 20220108759 A 20220803

DOCDB simple family (application)
AU 2020050599 W 20200612; EP 20822115 A 20200612; KR 20227001174 A 20200612