

Title (en)
DRIVE BATTERY FOR N-PHASE OPERATION OF AN ELECTRIC MOTOR, DRIVE SYSTEM AND A METHOD FOR OPERATING THE DRIVE SYSTEM

Title (de)
ANTRIEBSBATTERIE FÜR DEN N-PHASIGEN BETRIEB EINES ELEKTROMOTORS SOWIE EIN ANTRIEBSSYSTEM UND EIN VERFAHREN ZUM BETRIEB DES ANTRIEBSSYSTEMS

Title (fr)
BATTERIE D'ENTRAÎNEMENT POUR LE FONCTIONNEMENT EN N PHASES D'UN MOTEUR ÉLECTRIQUE, SYSTÈME D'ENTRAÎNEMENT ET PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME D'ENTRAÎNEMENT

Publication
EP 2994995 A2 20160316 (DE)

Application
EP 14723050 A 20140507

Priority
• DE 102013208583 A 20130508
• EP 2014059341 W 20140507

Abstract (en)
[origin: WO2014180906A2] A drive battery (60) for n-phase operation of an electric motor (50) is provided, which comprises at least 2 * n battery strings (40), each battery string (40) having a plurality of series-connected battery cells (30), and it being possible for at least one battery cell (30) per battery string (40) to be coupled to the respective battery string (40) and decoupled from the respective battery string (40) by actuation of a coupling circuit (7) associated with the respective battery cell (30). Each battery string (40) can also be connected to one of 2 * n pole windings of an electric motor (50) that can be n-phase operated, where $n \in \mathbb{N}^+$ and $n > 1$. According to the invention, in each case two of the at least 2 * n battery strings (40) are designed to generate a constantly phase-synchronous alternating voltage by actuation of the coupling circuits (7) of the respective battery cells (30) thereof. A drive system (70) and a method for operating a drive system (70) are also provided.

IPC 8 full level
B60L 11/18 (2006.01); **H02M 7/49** (2007.01); **H02P 23/06** (2006.01); **H02P 27/06** (2006.01)

CPC (source: EP US)
B60L 15/007 (2013.01 - EP US); **B60L 50/51** (2019.01 - EP US); **B60L 53/22** (2019.01 - EP US); **B60L 58/22** (2019.01 - EP US); **H02J 7/0024** (2013.01 - EP US); **H02J 7/1492** (2013.01 - EP US); **H02M 7/483** (2013.01 - EP US); **H02M 7/4835** (2021.05 - EP US); **H02M 7/49** (2013.01 - EP); **H02P 25/16** (2013.01 - US); **H02P 27/06** (2013.01 - EP US); **B60L 2220/58** (2013.01 - EP US); **B60L 2240/12** (2013.01 - EP US); **B60L 2240/421** (2013.01 - EP US); **B60L 2240/545** (2013.01 - EP US); **B60L 2240/547** (2013.01 - EP US); **B60L 2240/549** (2013.01 - EP US); **H01M 2220/20** (2013.01 - EP US); **H02J 7/0014** (2013.01 - EP US); **H02J 7/0048** (2020.01 - EP US); **H02J 2207/20** (2020.01 - EP US); **H02J 2310/48** (2020.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US); **Y02T 10/7072** (2013.01 - EP US); **Y02T 10/92** (2013.01 - EP US); **Y02T 90/12** (2013.01 - US); **Y02T 90/14** (2013.01 - EP US)

Citation (search report)
See references of WO 2014180906A2

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

DOCDB simple family (publication)
DE 102013208583 A1 20141113; CN 105228853 A 20160106; EP 2994995 A2 20160316; US 2016118922 A1 20160428; WO 2014180906 A2 20141113; WO 2014180906 A3 20150813

DOCDB simple family (application)
DE 102013208583 A 20130508; CN 201480026155 A 20140507; EP 14723050 A 20140507; EP 2014059341 W 20140507; US 201414889375 A 20140507