

Title (en)

GEAR SYSTEM, PEDAL CYCLE, AND METHOD OF RETROFITTING GEAR SYSTEM

Title (de)

GETRIEBESYSTEM, PEDALFAHRRAD UND VERFAHREN ZUM NACHRÜSTEN EINES GETRIEBESYSTEMS

Title (fr)

SYSTÈME D'ENGRENAGE, BICYCLETTE À PÉDALES ET PROCÉDÉ DE RATTRAPAGE DE SYSTÈME D'ENGRENAGE

Publication

EP 4247699 A1 20230927 (EN)

Application

EP 21839852 A 20211214

Priority

- GB 202019856 A 20201216
- EP 2021085656 W 20211214

Abstract (en)

[origin: WO2022129026A1] There is provided a gear system (100) for a pedal cycle (150). The gear system (100) comprises an epicyclic gear set (102) having a sun gear (104), one or more planet gears (106) meshed with the sun gear (104), and a ring gear (112) meshed with the one or more planet gears (106). Each of the planet gears (106) is connected to a planet carrier (110). The sun gear (104) has a connecting portion (118) for connecting to a component (122) of the pedal cycle (150). The gear (100) system comprises a control arrangement that is arranged to control a speed of rotation of the ring gear (112), so as to provide a variable gear ratio to the gear (100) system.

IPC 8 full level

B62M 11/14 (2006.01); **B62J 45/415** (2020.01); **B62M 11/16** (2006.01)

CPC (source: EP GB)

B62M 6/45 (2013.01 - GB); **B62M 6/55** (2013.01 - GB); **B62M 11/14** (2013.01 - EP); **B62M 11/145** (2013.01 - EP GB); **B62M 11/16** (2013.01 - EP); **B62J 45/4152** (2020.02 - 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 2022129026 A1 20220623; EP 4247699 A1 20230927; GB 202019856 D0 20210127; GB 2602447 A 20220706

DOCDB simple family (application)

EP 2021085656 W 20211214; EP 21839852 A 20211214; GB 202019856 A 20201216