

Title (en)

DRIVE DEVICE FOR AN ELECTRIC BICYCLE, AND ELECTRIC BICYCLE

Title (de)

ANTRIEBSVORRICHTUNG FÜR EIN ELEKTROFAHRRAD UND ELEKTROFAHRRAD

Title (fr)

DISPOSITIF D'ENTRAÎNEMENT POUR UNE BICYCLETTE ÉLECTRIQUE ET BICYCLETTE ÉLECTRIQUE

Publication

EP 4330128 A1 20240306 (DE)

Application

EP 22708119 A 20220224

Priority

- DE 102021110719 A 20210427
- EP 2022054674 W 20220224

Abstract (en)

[origin: WO2022228747A1] A drive device (5) for an electric bicycle (1) comprises a motor unit (6) having an electric motor for driving the electric bicycle (1). The drive device (5) comprises, furthermore, a pedal crank shaft (11, 12) which can be rotated about a rotational axis (R). Moreover, the drive device (5) comprises a transmission (15) which is configured to drive the electric bicycle (1), is coupled firstly to the motor unit (6) and secondly to the pedal crank shaft (11, 12), and is configured to output a torque for driving the electric bicycle (1). Furthermore, the drive device (5) comprises a motor housing (7), in which the motor unit (6) and the transmission (15) are arranged and through which the pedal crank shaft (11, 12) extends. Furthermore, a rotational speed sensor unit (10) is provided which comprises a rotational speed sensor (9) and a rotational speed disc (8), wherein the rotational speed disc (8) is coupled to the pedal crank shaft (11, 12) rotatably about the rotational axis (R) and is arranged outside the motor housing (7).

IPC 8 full level

B62M 6/50 (2010.01); **B62J 45/412** (2020.01); **B62M 6/55** (2010.01)

CPC (source: EP)

B62J 45/412 (2020.02); **B62M 6/50** (2013.01); **B62M 6/55** (2013.01)

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 102021110719 B3 20221020; CN 117693467 A 20240312; EP 4330128 A1 20240306; WO 2022228747 A1 20221103

DOCDB simple family (application)

DE 102021110719 A 20210427; CN 202280031564 A 20220224; EP 2022054674 W 20220224; EP 22708119 A 20220224