Title (en)

MOTOR FOR A BICYCLE, AND BICYCLE

Title (de

MOTOR FÜR EIN FAHRRAD UND FAHRRAD

Title (fr)

MOTEUR POUR BICYCLETTE ET BICYCLETTE

Publication

EP 4351956 A1 20240417 (DE)

Application

EP 21798307 A 20211018

Priority

- DE 102021002975 A 20210610
- EP 2021078751 W 20211018

Abstract (en)

[origin: WO2022258209A1] The invention relates to a motor (1) for a bicycle, comprising a wheel axle (14) that is designed to be secured to a frame of the bicycle; a hub housing (8) with a housing cover (9) that delimits an interior (31) of the motor in an axial direction (28) with respect to the wheel axle and has a housing cover through-hole (27), through which the wheel axle extends, a bearing seat (10), which protrudes from the rest of the housing cover in the axial direction, and at least two through-holes (12), which are arranged in the housing cover next to each other in the circumferential direction (30) with respect to the wheel axle; a driver (32) that is designed to receive a torque applied by the operator of the bicycle by peddling and has a driver through-hole (33), through which the wheel axle extends outside of the hub housing, and a respective pin (18) for each through-hole, said pin extending through one of the through-holes; a measuring disc (20) that is arranged in the interior and outside of the bearing seat in a radial direction (29) with respect to the wheel axle, has a measuring disc through-hole (34), through which the wheel axle extends, and is designed to receive the torque from the pins and transmit a torque to the hub housing; and a torque measuring device that is designed to determine the torque on the basis of a deformation of the measuring disc.

IPC 8 full level

B62J 45/411 (2020.01); B62J 45/423 (2020.01); B62M 6/65 (2010.01)

CPC (source: EP US)

B62J 45/411 (2020.02 - EP US); B62J 45/423 (2020.02 - EP); B62M 6/65 (2013.01 - EP US)

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 102021126910 A1 20221215; **DE 102021126910 B4 20230223**; EP 4351956 A1 20240417; US 2024109621 A1 20240404; WO 2022258209 A1 20221215

DOCDB simple family (application)

DE 102021126910 A 20211018; EP 2021078751 W 20211018; EP 21798307 A 20211018; US 202318534712 A 20231210