

Title (en)
BICYCLE GEARBOX

Title (de)
FAHRRADGETRIEBE

Title (fr)
BOITE DE VITESSES POUR CYCLES

Publication
EP 3784556 A1 20210303 (FR)

Application
EP 19723323 A 20190419

Priority
• FR 1870491 A 20180427
• EP 2019060244 W 20190419

Abstract (en)
[origin: WO2019206836A1] The present invention relates to a gearbox (1) for cycles (100) comprising: – at least a first (T1) and a second (T2) epicyclic geartrain, an epicyclic geartrain (T1, T2, T3) comprising: – a plurality of sun gears (11, 12, 17, 18, 22, 23) , and, a plurality of planet pinions (13, 14, 19, 20, 24, 25) associated with each sun gear (11, 12, 17, 18, 22, 23), said pluralities of planet pinions (13, 14, 19, 20, 24, 25) being mounted on a planet carrier (15, 26) and, - a peripheral annulus gear (16, 21, 27) configured to mesh with the planet pinions (13, 14, 19, 20, 24, 25) associated with a sun gear (11, 12, 17, 18, 22, 23), in which the gearbox (1) also comprises a clutch device (40) arranged between the first (T1) and the second (T2) epicyclic geartrains, in which a clutch pinion (41) is rotationally coupled to the planet carrier (15) and is configured to be able to move axially between a first position of engagement in which it is claw-coupled to a sun gear (12) of the first epicyclic geartrain (T1) and a second position of engagement in which it is claw-coupled to a sun gear (17) of the second epicyclic geartrain (T2), the clutch pinion (41) also being configured to be in a disengaged intermediate position.

IPC 8 full level
B62M 11/18 (2006.01); **B62K 19/30** (2006.01); **B62M 6/55** (2010.01); **B62M 11/14** (2006.01); **B62M 11/16** (2006.01); **B62M 25/04** (2006.01); **F16H 3/66** (2006.01)

CPC (source: EP)
B62K 19/30 (2013.01); **B62M 6/55** (2013.01); **B62M 11/145** (2013.01); **B62M 11/16** (2013.01); **B62M 11/18** (2013.01); **B62M 25/04** (2013.01); **F16H 3/663** (2013.01); **F16H 2200/0078** (2013.01); **F16H 2200/201** (2013.01); **F16H 2200/2051** (2013.01); **F16H 2200/2076** (2013.01); **F16H 2200/2092** (2013.01)

Citation (search report)
See references of WO 2019206836A1

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)
WO 2019206836 A1 20191031; EP 3784556 A1 20210303; FR 3080664 A1 20191101; FR 3080664 B1 20211203

DOCDB simple family (application)
EP 2019060244 W 20190419; EP 19723323 A 20190419; FR 1870491 A 20180427