

Title (en)

VEHICLE DOOR HANDLE ASSEMBLY

Title (de)

FAHRZEUGTÜRGRIFFANORDNUNG

Title (fr)

ENSEMble POIGNÉE DE PORTIÈRE DE VÉHICULE

Publication

**EP 3645813 A1 20200506 (EN)**

Application

**EP 18740742 A 20180628**

Priority

- EP 17178801 A 20170629
- EP 2018067423 W 20180628

Abstract (en)

[origin: EP3421702A1] The invention relates to a coupling device for a vehicle door handle (1), the door handle (1) having a handle lever (3) movable between a flush position in which it is flush with an exterior door panel (100) surface and a ready position in which it is protruding and graspable by a user by an electric motor (7), and an inward clicking position in which a preloaded push-push unit (13) is released so as to bring the handle lever (3) in said ready position without actuation of the electric motor (7), comprising : #c a central shaft (31), connected to the handle lever (3), #c a push-push lever cylinder (29), rotatively coupled with the central shaft (19), interacting via a push-push lever (45) with the push-push unit (13) when the handle lever (3) is pushed inwards in the clicking position so as to release the preloaded push-push unit (13) and push the lever (3) in the ready position, #c a coupling gear (27), rotatively coupled with the central shaft (31), interacting with the electric motor (7) to move the handle lever (3) from the flush position to the ready position on actuation of the electric motor, wherein the coupling gear and push-push lever cylinder (29) comprise for one an axial protrusion (41) and for the other a circular arc recess (43), the axial protrusion (41) engaging in the circular arc recess (43) so as to allow a free relative rotation of the coupling gear (27) and push-push lever cylinder (29) within an angular range corresponding at least to the angular distance between the ready position and the clicking position of the handle lever (3).

IPC 8 full level

**E05B 85/10** (2014.01); **E05B 81/06** (2014.01); **E05B 81/76** (2014.01); **E05B 81/90** (2014.01)

CPC (source: EP)

**E05B 81/90** (2013.01); **E05B 85/103** (2013.01); **E05B 85/107** (2013.01); **E05B 81/06** (2013.01); **E05B 81/76** (2013.01)

Citation (search report)

See references of WO 2019002472A1

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)

**EP 3421702 A1 20190102; EP 3421702 B1 20200513;** CN 110799713 A 20200214; CN 110799713 B 20210831; EP 3645813 A1 20200506;  
JP 2020525689 A 20200827; JP 7121055 B2 20220817; WO 2019002472 A1 20190103

DOCDB simple family (application)

**EP 17178801 A 20170629;** CN 201880043334 A 20180628; EP 18740742 A 20180628; EP 2018067423 W 20180628;  
JP 2019572633 A 20180628