

Title (en)

VEHICLE DOOR HANDLE ASSEMBLY

Title (de)

FAHRZEUGTÜRGRIFFANORDNUNG

Title (fr)

ENSEMble DE POIGNÉE DE PORTE DE VÉHICULE

Publication

EP 3421701 A1 20190102 (EN)

Application

EP 17178797 A 20170629

Priority

EP 17178797 A 20170629

Abstract (en)

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 between 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 lever shaft (27), connected to the handle lever (3), #c a push-push lever ring (29), rotatively coupled with the lever shaft (19), interacting via a push-push lever (30) 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 ready position, #c a coupling gear (31), rotatively coupled with the lever shaft (27), interacting with the electric motor (7) to move the handle lever (3) from the flush position to the ready position, wherein the lever shaft (27) is rotatively coupled to the coupling gear (31) via a coupling mechanism supported by the lever shaft (27) and rotatively linking the lever shaft (27) and the coupling gear (31), the coupling mechanism being configured to allow free rotational movement of the lever shaft (27) with respect to the coupling gear (31) within an angular range corresponding 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 81/90** (2014.01); **E05B 81/06** (2014.01); **E05B 81/76** (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)

- [A] DE 102014113495 A1 20160324 - HUF HUELSBECK & FUERST GMBH & CO KG [DE]
- [A] FR 3016854 A1 20150731 - MGI COUTIER ESPANA SL [ES]
- [A] WO 2015074020 A1 20150521 - ILLINOIS TOOL WORKS [US]

Cited by

FR3103008A1

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 3421701 A1 20190102; EP 3421701 B1 20200506; CN 110799714 A 20200214; CN 110799714 B 20210827; EP 3645812 A1 20200506; JP 2020525684 A 20200827; JP 7204693 B2 20230116; WO 2019002469 A1 20190103

DOCDB simple family (application)

EP 17178797 A 20170629; CN 201880043441 A 20180628; EP 18740741 A 20180628; EP 2018067420 W 20180628; JP 2019572497 A 20180628