

Title (en)

VEHICLE DOOR DEVICE WITH A CURRENTLESS OPENING FUNCTION

Title (de)

FAHRZEUGTÜRVORRICHTUNG MIT STROMLOSER ÖFFNUNGSFUNKTION

Title (fr)

DISPOSITIF DE PORTE DE VÉHICULE À FONCTION D'OUVERTURE SANS COURANT

Publication

EP 3976911 B1 20230719 (DE)

Application

EP 20727218 A 20200518

Priority

- DE 102019003805 A 20190531
- EP 2020063777 W 20200518

Abstract (en)

[origin: WO2020239489A1] The invention relates to a vehicle sliding door device (1), comprising at least the following: at least one sliding door (2) which can be moved in a movement direction (8) or a pivoting and sliding door which can be pivoted in a pivoting direction and which can be moved in a movement direction relative to a door frame (6) that has a door opening (4); and a locking device (10) for locking the at least one sliding door (2) at least in the closed position, comprising an emergency unlocking device (12), by means of which the at least one sliding door (2) which is locked in the closed position can be unlocked in the event of an emergency. According to the invention, an emergency opening device is provided for at least partly opening the at least one sliding door (2) or the pivoting and sliding door in the event of an emergency in an emergency unlocking state, said emergency opening device containing a currentlessly operating magnet device (28) that exerts a magnetic force (48), which is generated without applying an electric current, onto the at least one sliding door (2) or pivoting and sliding door when the at least one sliding door (2) or pivoting and sliding door is in the closed position and is unlocked by means of the emergency unlocking device (12) in the event of an emergency such that the at least one sliding door (2) or pivoting and sliding door is pushed or pulled at least partly from the closed position in the direction of the open position, wherein the at least one first permanent magnet (30) is statically arranged on the at least one sliding door (2) or pivoting and sliding door and the at least one magnetically conductive element (32) is statically arranged on the door frame (6) or on the door guide (22, 24), or the at least one first permanent magnet (30) is statically arranged on the door frame (6) or on the door guide (22, 24) and the at least one magnetically conductive element (32) is statically arranged on the at least one sliding door (2) or pivoting and sliding door.

IPC 8 full level

E05B 81/20 (2014.01); **E05F 15/655** (2015.01)

CPC (source: CN EP US)

B61D 19/005 (2013.01 - CN); **E05B 77/02** (2013.01 - CN); **E05B 81/20** (2013.01 - US); **E05B 81/90** (2013.01 - CN); **E05F 15/655** (2015.01 - EP US); **E05Y 2201/22** (2013.01 - EP); **E05Y 2201/426** (2013.01 - EP US); **E05Y 2201/46** (2013.01 - EP US); **E05Y 2900/51** (2013.01 - US); **E05Y 2900/531** (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

DOCDB simple family (publication)

WO 2020239489 A1 20201203; BR 112021023673 A2 20220412; CN 113891977 A 20220104; CN 113891977 B 20220830; DE 102019003805 A1 20201203; EP 3976911 A1 20220406; EP 3976911 B1 20230719; US 2022228417 A1 20220721

DOCDB simple family (application)

EP 2020063777 W 20200518; BR 112021023673 A 20200518; CN 202080040208 A 20200518; DE 102019003805 A 20190531; EP 20727218 A 20200518; US 202017615430 A 20200518