

Title (en)
PLUG DOOR DEVICE

Title (de)
DREHSCHWENKTÜR

Title (fr)
DISPOSITIF DE PORTE ENCASTRÉE

Publication
EP 4063601 A1 20220928 (EN)

Application
EP 22163316 A 20220321

Priority
JP 2021052959 A 20210326

Abstract (en)
One aspect of the present invention provides a plug door device 1 including a stationary base 3 fixedly attached to a body of a vehicle, a slidable base 4 having a door 2 attached thereto to open or close a doorway 15 of the vehicle, where the slidable base 4 being movable in a width direction of the vehicle relative to the stationary base 3 when acted upon by a driving force from a drive source 6, and a restricting mechanism 40 for restricting the slidable base 4 from moving in the width direction when the door 2 is fully closed. The restricting mechanism 40 includes two stationary members 42 fixedly attached to the stationary base 3, where the stationary members 42 each have a restricting part 41, two movable members 43 attached to two portions of the slidable base 4 that are separate from each other in a front-rear direction of the vehicle, and a connecting shaft 44 connecting together the two movable members 43. When the door 2 is fully closed, the two movable members 43 touch the restricting parts 41, so that the slidable base 4 is restricted from moving in the width direction.

IPC 8 full level
E05D 15/10 (2006.01); **B61D 19/00** (2006.01); **E05B 83/36** (2014.01); **E05F 15/646** (2015.01); **E05F 15/655** (2015.01)

CPC (source: CN EP)
E05D 15/1068 (2013.01 - CN EP); **E05F 15/643** (2015.01 - CN); **E05F 15/646** (2015.01 - EP); **E05F 15/655** (2015.01 - CN EP); **E05D 2015/1026** (2013.01 - EP); **E05D 2015/1073** (2013.01 - EP); **E05Y 2201/22** (2013.01 - EP); **E05Y 2201/62** (2013.01 - EP); **E05Y 2201/682** (2013.01 - EP); **E05Y 2201/686** (2013.01 - EP); **E05Y 2800/296** (2013.01 - EP); **E05Y 2900/506** (2013.01 - EP); **E05Y 2900/51** (2013.01 - CN EP); **E05Y 2900/531** (2013.01 - CN)

Citation (applicant)
JP 2016538171 A 20161208

Citation (search report)
• [X] DE 202012100077 U1 20120227 - TEUFL MANFRED [AT], et al
• [X] DE 202014102405 U1 20150828 - BODE GMBH & CO KG [DE]
• [X] EP 1314626 A1 20030528 - BODE GMBH & CO KG [DE]
• [A] EP 1488977 A1 20041222 - HUEBNER GMBH [DE]

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 4063601 A1 20220928; CN 115126373 A 20220930; JP 2022150380 A 20221007

DOCDB simple family (application)
EP 22163316 A 20220321; CN 202210217107 A 20220307; JP 2021052959 A 20210326