

Title (en)
PLUG DOOR DEVICE AND SWING ARM MECHANISM

Title (de)
STECKTÜRVORRICHTUNG UND SCHWENKARMMECHANISMUS

Title (fr)
DISPOSITIF DE PORTE ENCASTRÉE ET MÉCANISME DE BRAS OSCILLANT

Publication
EP 4124538 A1 20230201 (EN)

Application
EP 22186517 A 20220722

Priority
• JP 2021124388 A 20210729
• JP 2021156647 A 20210927

Abstract (en)
A plug door device (1) according to an aspect of the invention includes: a stationary base (3) fixed to a body of a vehicle; a slidable base (4) provided on the stationary base (3) so as to be movable in a width direction of the vehicle relative to the stationary base (3); a door drive mechanism (30) provided on the slidable base (4) and configured to move a door (2) for opening and closing a doorway (15) of the vehicle in a front-rear direction of the vehicle; and a swing arm mechanism (50) configured to guide the door (2) as the door (2) moves in the width direction of the vehicle and the front-rear direction of the vehicle, and configured to move an upper portion of the door (2) and a lower portion of the door (2) in an interlocking manner. The swing arm mechanism (50) includes: a pillar portion (51) extending in a height direction of the vehicle; a support portion (52) supporting the pillar portion (51) so as to be rotatable around a longitudinal direction of the pillar portion (51); and a fixing portion (53) meshing with the support portion (52) to fix the pillar portion (51) to the body of the vehicle. The support portion (52) includes a meshing portion (71) that can mesh with the fixing portion (53) at different meshing positions in the longitudinal direction of the pillar portion (51).

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CPC (source: EP)
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CN 201687303 U 20101229 - BEIJING BODE TRANSP EQUIPMENT CO LTD

Citation (search report)
• [A] CN 208069668 U 20181109 - SHENYANG BODE TRAFFIC EQUIPMENT CO LTD
• [A] WO 2013048998 A1 20130404 - WABTEC HOLDING CORP [US]
• [YA] CN 211685093 U 20201016 - CRRC TANGSHAN CO LTD
• [YA] CN 201687303 U 20101229 - BEIJING BODE TRANSP EQUIPMENT CO LTD

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