

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  
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• 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).

IPC 8 full level  
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CPC (source: EP)  
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Citation (applicant)  
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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