

Title (en)

Sliding door device.

Title (de)

Schiebetürvorrichtung.

Title (fr)

Dispositif pour porte coulissante.

Publication

EP 0567262 A1 19931027 (EN)

Application

EP 93302837 A 19930413

Priority

JP 3168892 U 19920414

Abstract (en)

A door closer (1) and a driven pulley (2) are arranged opposite to the conventional arrangement, and a tension spring (7) is provided at a belt end (3a) retained at a roller unit (C) on the driven pulley side. The door closer (1) and the driven pulley (2) may be arranged in the same manner as in the conventional arrangement if the tension spring (7) is provided at a belt end (3a) retained at the roller unit (C) on the door closer side. Further, the door closer (1) and the driven pulley (2) may be arranged in the same manner as in the conventional arrangement if a short pipe (11) is provided so as to encase the tension spring (7) on the driven pulley side between a metallic member (5) and a nut (8). According to this invention, even if an external force is applied during a door closing operation, a tooth jump of a timing belt is avoided, a tooth jump preventing roller is dispensed with, and the number of the mechanical parts and the cost therefor may be reduced. The mounting work of the device may be simplified. <IMAGE>

IPC 1-7

E05F 1/08; **E05F 3/08**

IPC 8 full level

E05F 1/16 (2006.01); **E05F 1/08** (2006.01); **E05F 3/08** (2006.01)

CPC (source: EP)

E05F 1/16 (2013.01); **E05F 3/08** (2013.01); **E05D 13/1276** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)

- [A] US 4330960 A 19820525 - HASEMANN WERNER, et al
- [AD] PATENT ABSTRACTS OF JAPAN vol. 015, no. 006 (M-1066)(4534) 8 January 1991 & JP-A-02 256 779 (SANWA SHUTTER CORP) 17 October 1990

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US7124469B2; US11246231B2; US6735820B1; DE202008012990U1; WO2023165064A1; EP3880925B1

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