

Title (en)

SLIDING DOOR COMPRISING A MAGNETIC SUPPORT AND/OR DRIVE SYSTEM COMPRISING A ROW OF MAGNETS

Title (de)

SCHIEBETÜR MIT EINEM MAGNETISCHEN TRAG- UND/ODER ANTRIEBSSYSTEM MIT EINER MAGNETREIHE

Title (fr)

PORTE COULISSANTE COMPRENANT UN SYSTEME DE SUPPORT ET/OU D'ENTRAÎNEMENT MAGNETIQUE PRESENTANT UNE RANGEE D'AIMANTS

Publication

**EP 1805386 A1 20070711 (DE)**

Application

**EP 05790105 A 20051008**

Priority

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Abstract (en)

[origin: WO2006040098A1] The invention relates to a sliding door comprising a magnetic support and/or drive system for at least one door wing (5), comprising a linear drive unit which is provided with at least one row of soft or hard magnetic elements (1, 1e, 1f) which are arranged in the direction of driving and at least one coil arrangement made of several individual coils (7, 7a, 7b, 7c), said coil arrangement bringing about an interaction with the at least one row of soft or hard magnetic elements (1, 1e, 1f) during the corresponding control of the individual coils, which produce advance forces, and/or a permanently excited magnetic support device which comprises at least one row of magnets (1, 1e, 1f), at least one soft or hard magnetic support element (2a, 2b, 2d) which is in dynamic effect with at least one of the at least one row of magnets (1, 1e, 1f), and a guide element (3). The guide element ensures a specific gap-like distance between the at least one row of magnets (1, 1e, 1f) and the support element (2a, 2b, 2d), and the at least one row of magnets (1, 1e, 1f) can be formed from the at least one row of hard magnetic elements (1, 1e, 1f) which are arranged in the direction of driving. The inventive linear drive unit and/or support device has a reduced amount of engaging force and/or the total magnetisation of the at least one row of magnets does not have any abrupt sign changes in the direction of driving.

IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

- JP H05231068 A 19930907 - FUJI ELECTRIC CO LTD
- US 4638192 A 19870120 - VON DER HEIDE JOHANN [DE]
- JP 2002209371 A 20020726 - YASKAWA ELECTRIC CORP
- See also references of WO 2006040098A1

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DOCDB simple family (publication)

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