

Title (en)

Sliding door assembly provided with a linear motor

Title (de)

Schiebetüranordnung mit Linearmotor

Title (fr)

Ensemble porte coulissante pourvue d'un moteur linéaire

Publication

EP 2873794 A1 20150520 (EN)

Application

EP 13193212 A 20131115

Priority

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Abstract (en)

A sliding door assembly comprises a door leaf (24) provided with an upper horizontal edge and a lower horizontal edge; an upper guide rail assembly (20, 42) for guiding the upper edge of the door leaf (24) in translation parallel to a horizontal sliding direction (100) relative to the upper guide rail assembly (20, 42) between a first end position and a second end position; and one or more rows (28, 30) of first magnetic field generating elements fixed to the door leaf (24), each of the rows (28, 30) extending horizontally. The one or more rows (28, 30) of first magnetic field generating elements are each located at an intermediate position below the upper horizontal edge and upper guide rail (20, 42) and above a lower horizontal edge of the door leaf. One or more stators (38, 40) each associated with one of the rows (28, 30) of first magnetic field generating elements overlap with one end of the rows (28, 30) of first magnetic field generating elements in the first position. Each stator comprises a second magnetic field generating element located at an air gap distance of the associated one of the rows (28, 30) of first magnetic field generating elements for generating an induced electromagnetic force in the sliding direction (100) on the associated one of the rows (28, 30) of first magnetic field generating elements, the one or more stators (38, 40) being stationary with respect to the upper guide rail assembly (20, 42).

IPC 8 full level

E05F 15/60 (2015.01); **E05D 15/06** (2006.01); **E05D 15/10** (2006.01)

CPC (source: BR CN EP)

E05D 15/06 (2013.01 - CN EP); **E05D 15/063** (2013.01 - BR CN EP); **E05D 15/0665** (2013.01 - BR CN EP); **E05D 15/1002** (2013.01 - BR CN EP); **E05D 15/1068** (2013.01 - CN EP); **E05F 15/60** (2015.01 - EP); **E05D 2015/1078** (2013.01 - CN EP); **E05Y 2800/102** (2013.01 - CN EP); **E05Y 2800/22** (2013.01 - CN EP); **E05Y 2900/51** (2013.01 - CN EP)

Citation (applicant)

EP 1681426 A2 20060719 - DORMA GMBH & CO KG [DE]

Citation (search report)

- [XAYI] DE 102008011735 A1 20090903 - GM GLOBAL TECH OPERATIONS INC [US]
- [XI] US 3697838 A 19721010 - NEW JOHN D
- [Y] WO 9012184 A1 19901018 - OCLAP SRL [IT]
- [AD] EP 1681426 A2 20060719 - DORMA GMBH & CO KG [DE]

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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