Title (en)

Automatic door closer

Title (de)

Automatischer Türschließer

Title (fr)

Ferme-porte automatique

Publication

EP 2623699 A1 20130807 (EN)

Application

EP 13166246 A 20090626

Priority

- TW 97124352 A 20080627
- EP 09163898 A 20090626

Abstract (en)

An automatic door closer comprises a casting (10), a sliding assembly (20), a drive assembly (30), a tube shaped piston (41) and a first resilient member (51). The casting (10) has a front chamber (111), a rear chamber (113), a middle chamber (112) in communication with the front chamber (111) and the rear chamber (113), a shaft hole (12) penetrating the middle chamber (112) and a first oil passage (13). The first oil passage (13) has an oil inlet (13a) in communication with the front chamber (111) and an oil outlet (13b) in communication with the rear chamber (113). The sliding assembly (20) disposed within the middle chamber (112) of the casting (10) comprises a slider (21) disposed between the oil inlet (13a) and the oil outlet (13b), a first roller (22) and a second roller (23), wherein the first and second rollers (22, 23) are disposed within the slider (21) respectively. The drive assembly (30) comprises a shaft (31) and an eccentric cam (32) coupled to the shaft (31), the shaft (31) is pivotally disposed within the shaft hole (12) of the casting (10), the eccentric cam (32) is located within the slider (21) and contacts against the first and second rollers (22, 23) of the sliding assembly (20). The tube shaped piston (41) disposed within the rear chamber (113) of the casting (10) has a first end portion (411) and a second end portion (412) opposite to the first end portion (411), the first end portion (411) is connected with the first roller (22). The first resilient member (51) is disposed within the front chamber (111) of the casting (10) serving for pushing the slider (21) of the sliding assembly (20) to move.

IPC 8 full level

E05F 15/04 (2006.01); **E05F 3/06** (2006.01); **E05F 3/10** (2006.01)

CPC (source: EP)

E05F 3/06 (2013.01); **E05F 3/104** (2013.01); **E05F 15/53** (2015.01); E05F 3/12 (2013.01); E05Y 2800/22 (2013.01); E05Y 2900/132 (2013.01)

Citation (applicant)

- TW 428658 B
- US 5901412 A 19990511 - JENTSCH DIETRICH [DE]

Citation (search report)

- [A] US 5901412 A 19990511 - JENTSCH DIETRICH [DE]
- [A] DE 20112896 U1 20021205 - IT PROGETTI S R L SOC [IT]
- [A] EP 0146693 A2 19850703 - DORMA BAUBESCHLAG [DE]

Cited by

EP2746508B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2138662 A2 20091230; **EP 2138662 A3 20100728**; **EP 2138662 B1 20130626**; EP 2623699 A1 20130807; ES 2429218 T3 20131113; TW 201000741 A 20100101; TW I345607 B 20110721

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