Title (en)

Door closer.

Title (de)

Türschliesser.

Title (fr)

Ferme-porte.

Publication

EP 0215264 A2 19870325 (DE)

Application

EP 86110703 A 19860802

Priority

DE 8526660 U 19850918

Abstract (en)

1. Door closer with a rotating member which can be connected to the door, the rotary movement of which can be converted into a displacement movement of a piston rod (4), a piston (1) wich can be displaced against the force of a return spring (5) being located in a cylinder (2) at the end of the piston rod furthest from the rotating member and when the door is opened a hydraulic fluid being forced by the piston from the front cylinder space (6) picked up by the piston rod through a nonreturn valve into a rear cylinder space (7), from which when the door is turned back, it flows back via a first housing channel (14) and via a first throttle valve (12) installed in it, characterized in that the first throttle valve (12) is connected hydraulically to a second throttle valve (18) via a second channel (16) opening out into the front cylinder space (6), the mouth (19) of the second channel (16) is nearer in the front cylinder space (6) to the rotating member than the mouth (13) of the first channel (14) in the front cylinder space (6) and in that the piston (1) with an opening angle of the door of more than approximately 808 to 908 closes the said mouth (13) of the first channel (14), whilst the said mouth (13) of the first channel (14), whilst the said mouth (19) of the second channel (16) is open every opening angle of the door.

Abstract (de)

Der Türschließer kann aufgrund der Verwendung von mehreren Drosselventilen (12, 18, 22, 23) sowie Hilfs- und Überdruckventilen (40, 34, 47, 53) in jeder gewünschten Weise benutzt werden, wobei die Schließgeschwindigkeit in jedem Bereich über die Drosselventile steuerbar ist. Durch völliges Schließen des zweiten Drosselventils (18) kann man den Flügel in jeder beliebigen Öffnungslage über ca. 80 bis 90° feststellen. Zum Schließen des Türflügels ist eine an ihm angreifende, in Schließrichtung wirkende Handkraft notwendig. Die Rückstellung des Flügels erfolgt in bekannter Weise mit Hilfe einer Rückstellfeder (5). Wird zusätzlich zu dieser mechanischen Rückstellkraft noch eine Handkraft auf den Flügel ausgeübt, so ermöglicht das dritte Überdruckventil (53) in der Art eines By-Passes eine beschleunigte Rückströmung der Dämpfungsflüssigkeit vom hinteren Zylinderraum (7) in dem vorderen Zylinderraum (6).

IPC 1-7

E05F 3/12

IPC 8 full level

E05F 3/12 (2006.01); **E05F 3/22** (2006.01)

CPC (source: EP)

E05F 3/12 (2013.01); **E05F 3/223** (2013.01); E05Y 2201/21 (2013.01); E05Y 2201/256 (2013.01); E05Y 2201/264 (2013.01); E05Y 2900/132 (2013.01)

Cited by

CN102959168A; US5161957A; ITVI20120255A1; EP0328933A1; US5107677A; EP0285775A1; EP0291654A1; DE10145200A1; EP2921625A1; DE10145200B4; CN110792349A; WO2011160785A1; EP2808475B1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0215264 A2 19870325; **EP 0215264 A3 19870812**; **EP 0215264 B1 19890412**; **EP 0215264 B2 19920401**; AT E42129 T1 19890415; DE 3662801 D1 19890518; DE 8526660 U1 19870122; ES 2002753 A6 19881001

DOCDB simple family (application)

EP 86110703 A 19860802; AT 86110703 T 19860802; DE 3662801 T 19860802; DE 8526660 U 19850918; ES 8601997 A 19860918