

Title (en)
Concealed door closer with adjustable back check

Title (de)
Verborgener Türschließer mit einstellbarem Rückschlag

Title (fr)
Ferme-porte caché avec recul réglable

Publication
EP 2505755 A3 20140723 (EN)

Application
EP 11166327 A 20110517

Priority
TW 100111087 A 20110330

Abstract (en)
[origin: EP2505755A2] A concealed door closer (10) with an adjustable back check includes a mount (20), a pivot unit (30) mounted to the mount, two damping units (40) connected with the pivot unit, two flow adjusting valves (50a, 50b) mounted in the mount, and a back check adjusting valve (60) mounted in the mount. An external force for opening door drives the pivot unit to rotate so as to actuate the damping units to move. The back check exerting on the door leaf during opening door can be adjusted subject to different conditions by controlling the position of the back check adjusting valve. As soon as the external force exerting on the door leaf for opening the door leaf is released, the door leaf will be gradually closed by the actuation of the damping units, and the speed at which the door closer closes the door can be adjusted by controlling the flow adjusting valves.

IPC 8 full level
E05F 3/10 (2006.01); **E05F 3/12** (2006.01)

CPC (source: EP)
E05F 3/12 (2013.01); **E05F 3/104** (2013.01); **E05Y 2201/20** (2013.01); **E05Y 2201/254** (2013.01); **E05Y 2800/21** (2013.01); **E05Y 2800/292** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)

- [XAI] US 6397430 B1 20020604 - BROWN PETER E [GB], et al
- [A] EP 0606168 A1 19940713 - EMHART INC [US]
- [A] US 2011030167 A1 20110210 - CHIANG CHI-TSAO [TW], et al
- [A] EP 0407150 A1 19910109 - RYOBI LTD [JP]

Cited by
US8813313B2; USD894713S; WO2013149313A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2505755 A2 20121003; EP 2505755 A3 20140723; TW 201239184 A 20121001; TW I367989 B 20120711

DOCDB simple family (application)
EP 11166327 A 20110517; TW 100111087 A 20110330