

Title (en)

Improved electric lock for a motor vehicle wing

Title (de)

Verbessertes elektrisches Schloss für einen Kraftfahrzeugflügel

Title (fr)

Serrure électrique perfectionnée pour ouvrant de véhicule automobile

Publication

EP 0978610 B1 20030521 (FR)

Application

EP 99401967 A 19990802

Priority

FR 9810057 A 19980805

Abstract (en)

[origin: EP0978610A1] The lock case (125) contains a motor and gear train driving a wheel having on one face two diametrically opposed pegs. Each peg as it revolves enters and leaves a notch (134) in a drive lever (132) on a common pivot (137) with and pinned (144) to the lock catch (131). While engaged, the peg rotates the lever (F3), compressing a return spring (143). In the closed position (motor deenergised), the lock bolt (130), on a separate pivot (139), retaining the hasp bar in its notch (138), is secured by the catch (131a, 136), which with the lever is pushed towards it by the spring. The bolt's curved face (135) rests on the lever shank (132c), while the lever's sprung (140) toe (140a) rides on its concave face (142). The peg's opening action draws the catch clear (d) of the bolt. The lever's resilient toe (140a) mean-time has ridden up the bolt face (142) and hooked over the vertex (141); however, in normal circumstances, reaction forces exerted by the compressed door seal, via the hasp bar, on the bolt notch (138) rotate the bolt, allowing the bar to escape, so releasing the door. If these forces should be insufficient, the second drive-wheel peg, arriving on the outer face (132a) of the lever, press through the toe on the bolt, keeping it in the closed position until, e.g. the user adds his efforts; meantime the motor remains stalled.

IPC 1-7

E05B 47/00; **E05B 65/20**

IPC 8 full level

E05B 65/12 (2006.01); **E05B 65/32** (2006.01); **E05B 65/20** (2006.01)

CPC (source: EP US)

E05B 81/14 (2013.01 - EP US); **E05B 85/26** (2013.01 - EP US); **E05B 81/15** (2013.01 - EP US); **Y10S 292/43** (2013.01 - EP US); **Y10T 292/1047** (2015.04 - EP US); **Y10T 292/1082** (2015.04 - EP US)

Cited by

DE10361168B4; CN103953230A; US11834870B2; EP1457625A3; DE102015110751A1; US10519700B2; WO2015000460A1; EP1632626A1; US7452013B2; US11098508B2

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DOCDB simple family (application)

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