

Title (en)  
LOCK FOR VEHICLE DOORS OR LIDS

Title (de)  
SCHLOSS FÜR TÜREN ODER KLAPPEN AN FAHRZEUGEN

Title (fr)  
SERRURE DE PORTIERE OU DE HAYON DE VEHICULES A MOTEUR

Publication  
**EP 1639218 B1 20060913 (DE)**

Application  
**EP 04739714 A 20040609**

Priority  
• EP 2004006194 W 20040609  
• DE 10327997 A 20030621

Abstract (en)  
[origin: WO2004113655A1] According to the invention, when the door is locked, a locking part (10) is displaced into a rotary latch (20), which is first pivoted from its open position into a preliminary detent position. The rotary latch (20) is spring-loaded (25) in the direction of its open position and is usually supported on a catch (30) by means of an initial detent section (21). The rotary latch (20) is then rotated further by means of a motor-driven closing aid with the aid of a drive mechanism (53) and an eccentric element (50), until it reaches a primary detent position, in which the catch (30) rests on a primary detent section of the rotary latch (20). To obtain a reliable lock that can be universally used, a toggle-joint lever pair (40) and a spring-loaded follower (33) are provided between the eccentric element (50) and the rotary latch (20). One fixed end (41) of said toggle-joint lever pair (40) is rotatably mounted in a locally fixed bearing (14) and the other free end (42) is forcibly guided by guide elements (15) and simultaneously supports the spring-loaded follower (33). The toggle-joint lever pair (40) is supported on a control curve (51) of the eccentric element (50). The closing displacement is attained by the extension and/or bending of the toggle-joint lever pair. The follower then seizes the rotary latch (20) and propels it in a motor-driven manner from its preliminary detent position into its primary detent position.

IPC 8 full level  
**E05B 65/32** (2006.01); **E05B 65/12** (2006.01)

CPC (source: EP KR US)  
**E05B 81/20** (2013.01 - EP US); **E05B 81/24** (2013.01 - KR); **E05B 85/20** (2013.01 - KR); **E05B 85/243** (2013.01 - EP US); **Y10T 292/1047** (2015.04 - EP US); **Y10T 292/1082** (2015.04 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004113655 A1 20041229**; AT E339574 T1 20061015; DE 10327997 A1 20050113; DE 502004001503 D1 20061026; EP 1639218 A1 20060329; EP 1639218 B1 20060913; JP 2007506879 A 20070322; KR 100991947 B1 20101104; KR 20060020691 A 20060306; US 2006284425 A1 20061221; US 7341290 B2 20080311

DOCDB simple family (application)  
**EP 2004006194 W 20040609**; AT 04739714 T 20040609; DE 10327997 A 20030621; DE 502004001503 T 20040609; EP 04739714 A 20040609; JP 2006515857 A 20040609; KR 20057024435 A 20040609; US 56109105 A 20051216