

Title (en)
Door lock for motor vehicle

Title (de)
Kraftfahrzeug-Türschloss

Title (fr)
Serrure de porte d'automobile

Publication
EP 1130198 A2 20010905 (DE)

Application
EP 01102941 A 20010208

Priority
DE 10009391 A 20000229

Abstract (en)
The lock (1) has an electric motor (4) driven by a drive voltage (U), to work in only one direction (3). A control element (8) is driven by the electric motor through a gear mechanism (7) that is at least partly self-locking in the direction opposite that of the drive. A diode (17) is connected parallel to the electric motor to take a lock voltage that is larger than the drive voltage and in the locking direction of the drive voltage. The diode minimizes reverse rotation of the electric motor when the drive is switched off. An Independent claim is included for the use of a diode in a vehicle door lock to operate an electric motor to drive the lock.

Abstract (de)
Es werden ein Kraftfahrzeug-Türschloß (1) und eine Verwendung einer Diode (17) vorgeschlagen, wobei ein Elektromotor (4) nur in einer Antriebsdrehrichtung betreibbar ist. Um ein Zurückdrehen des Elektromotors (4) entgegen der Antriebsdrehrichtung im abgeschalteten Zustand auf einfache Weise zu minimieren, ist eine Diode parallel zum Elektromotor geschaltet, die beim Zurückdrehen praktisch für ein Kurzschließen des Elektromotors (4) sorgt. Dadurch wird ein Rückprellen des Antriebs verhindert oder verringert.

IPC 1-7
E05B 17/22; **E05B 65/32**; **E05B 47/06**

IPC 8 full level
E05B 17/22 (2006.01); **E05B 47/06** (2006.01); **E05B 65/12** (2006.01); **E05B 65/32** (2006.01); **E05B 81/14** (2014.01); **E05B 81/56** (2014.01); **E05B 47/00** (2006.01); **E05B 81/34** (2014.01); **E05B 81/42** (2014.01)

CPC (source: EP US)
E05B 81/14 (2013.01 - EP US); **E05B 81/56** (2013.01 - EP US); **E05B 81/34** (2013.01 - EP US); **E05B 81/42** (2013.01 - EP US); **Y10T 292/0801** (2015.04 - EP US); **Y10T 292/089** (2015.04 - EP US); **Y10T 292/0977** (2015.04 - EP US); **Y10T 292/699** (2015.04 - EP US)

Citation (applicant)
DE 19747211 A1 19990506 - BOSCH GMBH ROBERT [DE]

Cited by
US6522095B2; US10400859B2; WO2014180459A1; WO2019063040A1

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EP 1130198 A2 20010905; **EP 1130198 A3 20030514**; **EP 1130198 B1 20040811**; DE 10009391 A1 20010913; DE 50103175 D1 20040916; ES 2223659 T3 20050301; US 2001030426 A1 20011018; US 6522095 B2 20030218

DOCDB simple family (application)
EP 01102941 A 20010208; DE 10009391 A 20000229; DE 50103175 T 20010208; ES 01102941 T 20010208; US 79424201 A 20010228