

Title (en)

DEVICE FOR LOCKING A MOVEABLE PART THAT IS FITTED ONTO A MOTOR VEHICLE

Title (de)

SICHERUNGSEINRICHTUNG AN EINEM BEWEGBAREN TEIL EINES KRAFTFAHRZEUGS

Title (fr)

DISPOSITIF DE VERROUILLAGE D'UNE PIECE MOBILE AGENCEE SUR UN VEHICULE AUTOMOBILE

Publication

EP 1109980 A1 20010627 (FR)

Application

EP 00914068 A 20000119

Priority

- DE 19902080 A 19990120
- DE 19949119 A 19991012
- EP 0000941 W 20000119

Abstract (en)

[origin: DE19949119A1] The invention relates to a device for locking a part (3; 21; 31) that is moveably mounted on a motor vehicle, whereby a fastening element (11; 26; 36) engages with a cavity in the form of a groove (7; 28; 38) of the part that is to be secured (3; 21; 31) under the effect of acceleration forces occurring during a collision of the corresponding vehicle with an obstacle. In order to enable the device to be assembled in an easy and non-cumbersome manner and to reliably prevent the vehicle door from opening in an undesirable manner when the acceleration forces from various directions are applied to the part that is to be secured, the fastening element (11; 26; 36) is controlled by a spherical control element (10; 22; 32), whereby said control element (10; 22; 32) rests upon a guide element (8; 23; 33) by means of control surfaces (9) that are rounded or conical in shape.

[origin: DE19949119A1] The lock comprises a spherical control part (10) mounted via a spring in a shaped guide cavity (8) arranged on an immovable part of the vehicle. The guide has a rounded or conical control surface (9) which ensures translation of the control part against the pressure of the spring. The control part is fixed to a locking pin (13) arranged in a groove shaped cavity (7) such that the pin engages in the groove during a corresponding translation of the control part.

IPC 1-7

E05B 1/00

IPC 8 full level

E05C 19/04 (2006.01); **B60J 5/00** (2006.01); **E05B 77/06** (2014.01); **E05B 85/16** (2014.01)

CPC (source: EP US)

E05B 77/06 (2013.01 - EP US); **E05B 85/16** (2013.01 - EP US); **Y10S 292/22** (2013.01 - EP US); **Y10S 292/30** (2013.01 - EP US);
Y10S 292/65 (2013.01 - EP US); **Y10T 70/5469** (2015.04 - EP US); **Y10T 70/5473** (2015.04 - EP US); **Y10T 70/577** (2015.04 - EP US);
Y10T 70/7751 (2015.04 - EP US); **Y10T 292/0876** (2015.04 - EP US); **Y10T 292/14** (2015.04 - EP US); **Y10T 292/57** (2015.04 - EP US);
Y10T 292/82 (2015.04 - EP US); **Y10T 292/85** (2015.04 - EP US); **Y10T 292/861** (2015.04 - EP US); **Y10T 292/869** (2015.04 - EP US);
Y10T 292/88 (2015.04 - EP US)

Citation (search report)

See references of WO 0043617A2

Cited by

EP3401472A1; US11187018B2; EP1187962B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 19949119 A1 20000810; DE 19949119 B4 20051229; EP 1109980 A1 20010627; JP 2002535519 A 20021022; US 6471262 B1 20021029;
WO 0043617 A2 20000727; WO 0043617 A3 20010405

DOCDB simple family (application)

DE 19949119 A 19991012; EP 0000941 W 20000119; EP 00914068 A 20000119; JP 2000595008 A 20000119; US 64656500 A 20000920