#### Title (en)

### ELECTRIC OPENING AND CLOSING DEVICE FOR A VEHICLE CLOSURE PROVIDED WITH A LOCK OF THE ARMOURED TYPE

# Publication

# EP 0143705 B1 19880511 (FR)

### Application

EP 84402361 A 19841120

# Priority

# FR 8318819 A 19831125

# Abstract (en)

[origin: ES8601383A1] A hooked bolt (12) and a locking lever (14) are mounted in a housing (10) and pivoted about a fixed axis (16) and a cylindrical part (28) on top of the housing, respectively. The locking is achieved mechanically when the boot lid is closed, and is reinforced electrically by a motor and redn. gear (66) which engages the external thread (68) of a driving nut (70). This ensures that the housing (10) slides axially into a sleeve (72) with a lower flange for fixing to the boot lid. - Partial opening is obtd. by reverse rotation of the motor which brings the housing (10) out of the sleeve (72) concomitantly with the automatic unlocking. When the bolt passes its angular position for locking, it trips an electrical contact (88) so as to start the motor. (1/11) EPAB- EP-143705 B A hooked bolt (12) and a locking lever (14) are mounted in a housing (10) and pivoted about a fixed axis (16) and a cylindrical part (28) on top of the housing, respectively. The locking is achieved mechanically when the boot lid is closed, and is reinforced electrically by a motor and redn. gear (66) which engages the external thread (68) of a driving nut (70). This ensures that the housing (10) slides axially into a sleeve (72) with a lower flange for fixing to the boot lid. - Partial opening is obtd. by reverse rotation of the motor which brings the housing (10) out of the sleeve (72) concomitantly with the automatic unlocking. When the bolt passes its angular position for locking, it trips an electrical contact (88) so as to start the motor. (27pp Dwg.No.1/11) - EP-143705 B A device for electrically opening and closing a movable body portion of a motor vehicle provided with an arming-type lock comprising a movable element (10) provided with a pivotal latch (12) in the form of a hook (20) capable of trapping a keeper (22) and a lever (14) for locking of the latch (12), said movable element being displaced under the action of a motor reducing means (60) so as to cause electrical closure of the movable body portion controlled by a first electric switch (88) operated by the latch (12), the locking lever (14) being actuated for the opening mode by mechanical means (98,106) for automatic unlocking, characterised in that the movable element (10) is a housing which is housed slidably in a guide case (72) coaxially with the axis of rotation of the locking lever (14) and the control stem (30) which is disposed in alignment with said lever, said control stem being provided with a rotation control lever (98). (12pp) USAB- US4597598 A The device comprises a guide sleeve fixed to the lid, and a lock case moveable in the sleeve. A gearmotor fixed relative to the lid moves the lock case between a partial opening and a closed position. A latch is pivotally mounted in the lock case. The latch has a hook engageable with a striker fixed to the lid when the latch is pivoted into a locked position. A locking lever has a pivot shaft having a control portion extending out of the lock case. The locking lever locks the latch in the locked position. - An electric contact is positioned such that when the case is in the partial opening position, the contact is engaged and triggered by the latch when it moves from the locked position and in a direction away from the unlocked position. The gearmotor is operatively connected to the electric contact for moving the case to the closed position.

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#### Cited by

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