

Title (en)

Security device for electrical opening parts in vehicles with a drive cable for an opening member, in particular window winders and sliding roofs

Title (de)

Sicherheitseinrichtung für elektrische Öffnungsteile in Fahrzeugen mit einem Antriebskabel für eine bewegliche Glied, insbesondere Schiebefenster und Schiebedächer

Title (fr)

Dispositif de sécurité pour ouvrants électriques de véhicule du type à cable d'entraînements d'un organe mobile, notamment lève-vitre et toits ouvrants

Publication

EP 0724279 A3 19961016 (FR)

Application

EP 96105244 A 19930624

Priority

- EP 93401628 A 19930624
- FR 9208620 A 19920710

Abstract (en)

[origin: EP0578529A1] In a window winder of the cable type, comprising a motor for driving the cable carrying a carriage (6) linked to a second carriage (7) supporting the window, the two carriages (6, 7) can be coupled by an elastic traction element (16) and one (6) of the carriages is fitted with an electrical switch (17), associated with the second carriage (7) so as to change state when the force on the carriage (7) carrying the glass (8) exceeds a predetermined value and when the elastic element (16) undergoes an elongation corresponding to the spacing between the carriages; the switch (17) forms part of an electrical circuit for supplying the motor, capable of reversing its direction of rotation when this switch (17) changes state, so as to free the movable member from an obstacle in its course. This electromechanical safety device is of simple structure and of low manufacturing cost. <IMAGE>

IPC 1-7

H01H 35/00; **E05F 15/00**

IPC 8 full level

B60J 1/00 (2006.01); **E05F 15/00** (2006.01); **E05F 15/10** (2006.01); **H01H 35/00** (2006.01)

CPC (source: EP US)

E05F 15/41 (2015.01 - EP US); **H01H 35/006** (2013.01 - EP US); **E05Y 2400/552** (2013.01 - EP US); **E05Y 2900/55** (2013.01 - EP US)

Citation (search report)

- [DA] US 2130764 A 19380920 - CONKLIN ROSCOE D
- [DA] FR 2461085 A1 19810130 - BODE & CO GEB [DE]

Cited by

CN111270943A

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0578529 A1 19940112; **EP 0578529 B1 19970312**; BR 9302821 A 19940222; CA 2100120 A1 19940111; DE 69308660 D1 19970417; DE 69308660 T2 19971113; DE 69323778 D1 19990408; DE 69323778 T2 19990729; EP 0724279 A2 19960731; EP 0724279 A3 19961016; EP 0724279 B1 19990303; FR 2693589 A1 19940114; FR 2693589 B1 19940930; JP H06167167 A 19940614; MX 9304139 A 19940429; US 5461826 A 19951031

DOCDB simple family (application)

EP 93401628 A 19930624; BR 9302821 A 19930709; CA 2100120 A 19930708; DE 69308660 T 19930624; DE 69323778 T 19930624; EP 96105244 A 19930624; FR 9208620 A 19920710; JP 17156293 A 19930712; MX 9304139 A 19930709; US 8783593 A 19930702