Title (en)

ELECTRIC WINDOW-RAISING DEVICE

Publication

EP 0008247 B1 19810923 (FR)

Application

EP 79400429 A 19790627

Priority

FR 7822662 A 19780801

Abstract (en)

[origin: EP0008247A1] 1. An electric window raising device, particularly for the doors of motor vehicles, of the type including a reduction drive mounted on a support housing (6) and of which one end of the motor armature shaft (2) constitutes a worm controlling a reduction wheel (3) made solid with a drive pinion (4) for a toothed sector (7) connected to the end of an operating arm (18) of the window and including, on the one hand, resilient fixing means which absorb the kinetic energy of the device at the moment of its arrest, and on the other hand, means for the angular limitation of the play of the end of the arm (18) situated to either side of said arm (18) on the toothed sector (7), characterized in that the toothed sector (7) includes, moulded in one piece therewith, a first rectangular frame of which the two lateral sides (12a) (13a) are resiliently deformable and which is provided with an axial locking stop (17) disposed on a resilient tongue (16) exerting a pressure on the arm (18) against the planes (12b and 13b) of two slides (12) and (13) formed on two resilient tongues (14) and (15) constituting the lateral sides (12a) and (13a) of the first frame, said stop (17) moving away resiliently upon passage of the arm (18) during its assembly until it comes into coincidence with a corresponding hole (19) formed in the arm (18) and in which it snap-engages at the same moment that the end of the arm (18) lodges in a second resiliently deformable frame of rectangular section which ensures lateral guiding and retention of the end (18a) of the arm (18) perpendicular to the plane of the toothed sector (7) and of which the resilient lateral sides constitute the means for absorbing the kinetic energy and bear upon the arm (18).

IPC 1-7

E05F 15/16

IPC 8 full level

E05F 11/44 (2006.01); E05F 15/16 (2006.01)

CPC (source: EP)

E05F 11/445 (2013.01); E05F 15/689 (2015.01); E05Y 2900/55 (2013.01)

Cited by

DE3120206A1; FR2561298A1; EP0604272A1; FR2699589A1; US5564230A; US5469656A; CN110630137A

Designated contracting state (EPC) DE GB IT

DOCDB simple family (publication)

EP 0008247 A1 19800220; EP 0008247 B1 19810923; DE 2960888 D1 19811210; ES 483770 A1 19800301; FR 2432602 A1 19800229; FR 2432602 B1 19850823; MA 18522 A1 19800401; PT 69929 A 19790801; RO 77861 A 19811225; TR 21083 A 19830629; YU 185079 A 19821031

DOCDB simple family (application)

EP 79400429 A 19790627; DE 2960888 T 19790627; ES 483770 A 19790731; FR 7822662 A 19780801; MA 18719 A 19790713; PT 6992979 A 19790717; RO 9833379 A 19790801; TR 2108379 A 19790730; YU 185079 A 19790730