

Title (en)

CLOSING AID FOR CLOSING THE DOOR OF A VEHICLE

Title (de)

SCHLIESSHILFE ZUM VERSCHLIESSEN EINER FARZEUGTÜR

Title (fr)

DISPOSITIF D'ASSISTANCE A LA FERMETURE POUR PORTE DE VEHICULE

Publication

EP 1567736 B1 20070718 (DE)

Application

EP 03773733 A 20031031

Priority

- DE 10251354 A 20021105
- EP 0350769 W 20031031

Abstract (en)

[origin: WO2004042178A1] The invention relates to a closing aid (1) for closing the door of a vehicle provided with a door lock, an engine hood, a luggage compartment lid, a hatchback or the like, with a bolt-shaped or bar-shaped closing element (17) which is arranged on a support plate (16) and which can be moved from an unlocked to a locked position by means of a drive device (3) with an output wheel (6) and a cam wheel (8) which is located downstream therefrom with actuating cams (10). When said element is in an unlocked position, a fork-shaped spring bolt which is associated with the door lock can engage therewith such that when the closing element (17) moves into a locked position by virtue of the fork-shaped spring bolt, the vehicle door is drawn in a closed position. In order to provide said closing aid (1) with a simple protection against clamping without impairing the closing function of the closing aid, a lock body coupling (7) is arranged between the output wheel (6) and the cam wheel (8), wherein locking balls (11) are impinged upon by means of a compression spring device (13) exhibiting a progressive characteristic spring curve and engage in corresponding recessed wall areas (14) of the cam wheel (8).

IPC 8 full level

E05B 65/12 (2006.01)

CPC (source: EP)

E05B 81/22 (2013.01); **E05B 81/21** (2013.01); **E05B 81/90** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004042178 A1 20040521; AT E367495 T1 20070815; DE 10251354 A1 20040519; DE 10251354 B4 20120419; DE 50307730 D1 20070830; EP 1567736 A1 20050831; EP 1567736 B1 20070718

DOCDB simple family (application)

EP 0350769 W 20031031; AT 03773733 T 20031031; DE 10251354 A 20021105; DE 50307730 T 20031031; EP 03773733 A 20031031