

Title (en)

ANTI-CHUTE DEVICE FOR OVERHEAD DOORS, AND SAFETY DEVICE FOR TENSION SPRINGS

Publication

EP 0392290 B1 19920812 (DE)

Application

EP 90106126 A 19900330

Priority

DE 3912291 A 19890414

Abstract (en)

[origin: EP0392290A1] The safety device is used as an economical and effective initial equipment and subsequent equipment part for door tension springs. If the spring force fails, the wedge-shaped rod (e), which is under pressure, blocks by means of the ball (f) the capacity of the tubular parts (a,b) connected to the doorframe (spring holder) and door lever (rocker) to slide one out of the other and provides a crash safeguard when the door closes. In the event of breaks and a lug pull-out at the door tension spring, the tubular linkage (a,b) is at the same time a deflection safeguard for the tensioned spring parts. By means of the setting ring (h) displaceable on the tubular part (b), a spring extension varied as a function of force and the constant door-lever travel during the opening of the door to the force dead centre in response to a spring retraction can be set. The drive-regulated door impact in the running rails thereby becomes more exact and less noisy. The outgoing-air and/or incoming-air metering (m) and the corresponding sleeve insert (i) within the tubular parts (a,b) damp the opening speed and/or especially usefully the closing speed of the door in the event of a difference between the spring drive and door mass. The impact on the bottom rail can thereby be regulated less noisily on the fixed door. <IMAGE>

IPC 1-7

E05D 13/00; **E05D 15/40**; **E05F 1/16**

IPC 8 full level

E05D 13/00 (2006.01); **E05D 15/40** (2006.01); **E05D 15/42** (2006.01); **E05F 1/16** (2006.01)

CPC (source: EP)

E05D 13/1215 (2013.01); **E05D 13/1223** (2013.01); **E05D 15/425** (2013.01); **E05Y 2900/106** (2013.01)

Cited by

US7254868B2

Designated contracting state (EPC)

AT BE CH ES FR GB IT LI LU NL

DOCDB simple family (publication)

EP 0392290 A1 19901017; **EP 0392290 B1 19920812**; AT E79438 T1 19920815; DE 3912291 C1 19900726; ES 2034789 T3 19930401

DOCDB simple family (application)

EP 90106126 A 19900330; AT 90106126 T 19900330; DE 3912291 A 19890414; ES 90106126 T 19900330