

Title (en)

Safety catch for an elevator with a speed governor attached to the cabin

Title (de)

Fangvorrichtung mit an einer Kabine angeordnetem Geschwindigkeitsbegrenzer für Aufzüge

Title (fr)

Parachute pour un ascenseur avec un régulateur de vitesse monté sur la cabine

Publication

EP 0475114 B1 19960327 (DE)

Application

EP 91113768 A 19910816

Priority

US 58242890 A 19900913

Abstract (en)

[origin: US5065845A] A safety apparatus includes a safety device and a centrifugal force speed governor for preventing overspeed conditions of an elevator car in both the downward direction and the upward direction. A bracket attached to the elevator car slidably retains a shaft at right angle to a guide rail attached to an elevator shaft wall. A U-shaped frame is attached to an end of the shaft and rotatably carries a running wheel. A compression spring extends over the shaft between the bracket and the frame to bias the running wheel against the web of the guide rail. On each side of the running wheel, a pair of release levers are rotatably supported to rotate during travel of the car in normal operation. In response to an overspeed condition, the release levers pivot into engagement with a pair of stationary ratchet wheels which are connected with a pair of actuating levers. The ratchet wheels are rotated by the running wheel which movement rotates the actuating levers. The actuating levers each move a release arm and one of the levers is connected to an actuating rod, which in turn is connected to a release arm of another safety device on the car. The release arms extend into a wedge box of the safety device to actuate wedge-shaped jaws to engage the guide rail. For resetting the safety apparatus, the elevator car is restarted after a safety stop in the opposite direction of travel.

IPC 1-7

B66B 5/04

IPC 8 full level

B66B 5/04 (2006.01); **B66B 5/22** (2006.01)

CPC (source: EP US)

B66B 5/044 (2013.01 - EP US)

Cited by

DE10241160B4; AU638866B2; EP2687474A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

US 5065845 A 19911119; AT E136001 T1 19960415; AU 638866 B2 19930708; AU 8381791 A 19920319; BR 9103946 A 19920526; CA 2049510 A1 19920314; CN 1023308 C 19931229; CN 1061945 A 19920617; DE 59107609 D1 19960502; DK 0475114 T3 19960708; EP 0475114 A1 19920318; EP 0475114 B1 19960327; ES 2087934 T3 19960801; FI 914211 A0 19910906; FI 914211 A 19920314; FI 92312 B 19940715; FI 92312 C 19941025; HK 85997 A 19970627; HU 207260 B 19930329; HU 912958 D0 19920128; HU T59642 A 19920629; JP 2863354 B2 19990303; JP H04246079 A 19920902; MX 9101017 A 19920504; NO 304181 B1 19981109; NO 913556 D0 19910910; NO 913556 L 19920316; ZA 916773 B 19920527

DOCDB simple family (application)

US 58242890 A 19900913; AT 91113768 T 19910816; AU 8381791 A 19910912; BR 9103946 A 19910913; CA 2049510 A 19910820; CN 91108807 A 19910910; DE 59107609 T 19910816; DK 91113768 T 19910816; EP 91113768 A 19910816; ES 91113768 T 19910816; FI 914211 A 19910906; HK 85997 A 19970619; HU 295891 A 19910913; JP 23192791 A 19910911; MX 9101017 A 19910910; NO 913556 A 19910910; ZA 916773 A 19910827