

Title (en)

SAFETY DEVICE FOR AN ELEVATOR SYSTEM COMPRISING A NUMBER OF ELEVATOR CARS INSIDE A SHAFT

Title (de)

SICHERHEITSEINRICHTUNG FÜR AUFGUGSSYSTEM MIT MEHREREN AUFGUGSKABINEN IN EINEM SCHACHT

Title (fr)

DISPOSITIF DE SECURITE DESTINE A UN SYSTEME D'ASCENSEUR COMPORTANT PLUSIEURS CABINES DANS UNE CAGE

Publication

EP 1562848 B1 20070124 (DE)

Application

EP 02808112 A 20021109

Priority

EP 0212538 W 20021109

Abstract (en)

[origin: US7353912B2] The invention relates to an elevator system with at least one shaft, in which at least two cars can be made to travel along a common traveling path, and also with a shaft information system for determining the positions and speeds of the cars, which is connected to an electrical safety device. In order to develop the elevator system in such a way that a high handling capacity can be achieved with constructionally simple means, while reliably preventing car collisions, it is proposed according to the invention that an emergency stop of at least one car is triggerable independently of the control units by means of the safety device if the distance between a first car and a second car or an end of the traveling path goes below a preselectable critical distance, and that the safety gear of at least one car is triggerable if the distance which this car assumes from the neighboring car or an end of the traveling path goes below a preselected minimum distance, the control units of at least all the cars of one traveling path being connected to one another and altogether forming a group control device.

IPC 8 full level

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Cited by

DE102014017487A1; DE102014017486A1; WO2010072714A1; US8813919B2; CN102264622A; DE102019104339A1; US8439167B2;
US8297409B2; WO2013092274A1; US9296590B2; WO2016083115A1; US10710841B2; WO2020169399A1; WO2016083114A1; US10464782B2;
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EP 1562848 B1 20070124; ES 2281572 T3 20071001; JP 2006505473 A 20060216; JP 4358747 B2 20091104; KR 100714174 B1 20070502;
KR 20050072821 A 20050712; MX PA05004900 A 20051117; RU 2005114484 A 20061220; RU 2325315 C2 20080527;
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EP 0312323 W 20031105; AT 02808112 T 20021109; AU 2003286152 A 20031105; BR 0316105 A 20031105; CN 02829861 A 20021109;
DE 50209397 T 20021109; EP 0212538 W 20021109; EP 02808112 A 20021109; ES 02808112 T 20021109; JP 2004550670 A 20021109;
KR 20057008262 A 20050509; MX PA05004900 A 20031105; RU 2005114484 A 20031105; TW 92131227 A 20031107;
US 12461605 A 20050506