

Title (en)
Machine-room-less elevator

Title (de)
Maschinenraumloser Aufzug

Title (fr)
Élévateur sans salle des machines

Publication
EP 2108610 A1 20091014 (EN)

Application
EP 09007870 A 20010927

Priority
• EP 01972540 A 20010927
• JP 0108451 W 20010927

Abstract (en)
A sheave, a car side deflection wheel and a weight side deflection wheel are arranged on a straight line when viewed along a hoistway, and the sheave, the car side deflection wheel and the weight side deflection wheel have their axes arranged in parallel with respect to one another. In addition, a main rope, after ascending from a weight along the hoistway, is wrapped around an upper side of the weight side deflection wheel, and thereafter the main rope, after being wrapped around the sheave and the car side deflection wheel, descends in the hoistway to arrive at a car.

IPC 8 full level
B66B 7/00 (2006.01); **B66B 11/00** (2006.01); **B66B 11/08** (2006.01)

CPC (source: EP KR)
B66B 11/002 (2013.01 - EP); **B66B 11/0045** (2013.01 - EP); **B66B 11/008** (2013.01 - EP); **B66B 11/04** (2013.01 - KR)

Citation (applicant)
• JP H11310372 A 19991109 - TOSHIBA ELEVATOR CO LTD, et al
• WO 9943596 A2 19990902 - OTIS ELEVATOR CO [US]
• JP H08175623 A 19960709 - DAIFUKU KK

Citation (search report)
• [XY] WO 9943596 A2 19990902 - OTIS ELEVATOR CO [US]
• [X] EP 0953538 A2 19991103 - TOSHIBA KK [JP]
• [X] JP H08175623 A 19960709 - DAIFUKU KK
• [YA] EP 1125883 A1 20010822 - CEAM S R L [IT]
• [Y] WO 0153186 A1 20010726 - OTIS ELEVATOR CO [US]

Cited by
CN101837919A

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1431231 A1 20040623; **EP 1431231 A4 20081210**; **EP 1431231 B1 20101215**; CN 1216785 C 20050831; CN 1476407 A 20040218; DE 60143674 D1 20110127; EP 2108610 A1 20091014; EP 2108610 B1 20110817; JP 4849431 B2 20120111; JP WO2003031310 A1 20050120; KR 20030048162 A 20030618; WO 03031310 A1 20030417

DOCDB simple family (application)
EP 01972540 A 20010927; CN 01819510 A 20010927; DE 60143674 T 20010927; EP 09007870 A 20010927; JP 0108451 W 20010927; JP 2003534302 A 20010927; KR 20037006939 A 20030522