

Title (en)
ELEVATOR DEVICE

Title (de)
AUFZUGSVORRICHTUNG

Title (fr)
ASCENSEUR

Publication
EP 1972593 A4 20171004 (EN)

Application
EP 06702659 A 20060110

Priority
JP 2006300141 W 20060110

Abstract (en)
[origin: EP1972593A1] There is obtained an elevator apparatus which can adapt to changes in the distance between guide rails and improves the ride comfort and safety of an elevator car and improves also the ease with which the guide rails are installed. The elevator apparatus is equipped with a car which ascends and descends in an elevator shaft, a pair of guide rails which are provided in the elevator shaft and whose mutual distance changes partially, a car guide device which is provided in the car, can freely move forward and backward to any horizontal position with respect to the car, and constantly abuts against the guide rails by responding to changes in the mutual distance of the guide rails, and a safety gear device which is provided in the car, can freely move forward and backward to any horizontal position with respect to the car, is constantly opposed to the guide rails with equal spacing therefrom by responding to changes in the mutual distance of the guide rails, and brings the car to an emergency stop by grasping the guide rails during a fall of the car at an overspeed.

IPC 8 full level
B66B 5/22 (2006.01); **B66B 7/02** (2006.01); **B66B 7/04** (2006.01); **B66B 9/16** (2006.01)

CPC (source: EP)
B66B 5/22 (2013.01); **B66B 7/042** (2013.01); **B66B 9/003** (2013.01)

Citation (search report)
• [A] US 5810120 A 19980922 - JAMIESON ERIC K [US], et al
• [A] US 5086882 A 19920211 - SUGAHARA JUN [JP], et al
• [A] EP 1604935 A1 20051214 - MITSUBISHI ELECTRIC CORP [JP]
• See references of WO 2007080626A1

Cited by
CN104291185A; EP3502031A1; CN104370249A; KR20170122264A; CN107406223A; WO2016139243A1; US10138091B2; US11434104B2

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1972593 A1 20080924; **EP 1972593 A4 20171004**; CN 101102955 A 20080109; CN 101102955 B 20100519; JP 4888389 B2 20120229; JP WO2007080626 A1 20090611; WO 2007080626 A1 20070719

DOCDB simple family (application)
EP 06702659 A 20060110; CN 200680002021 A 20060110; JP 2006300141 W 20060110; JP 2007513536 A 20060110