

Title (en)
ELEVATOR DEVICE

Title (de)
AUFZUGSVORRICHTUNG

Title (fr)
DISPOSITIF D'ASCENSEUR

Publication
EP 1870370 A4 20121003 (EN)

Application
EP 05730468 A 20050414

Priority
JP 2005007224 W 20050414

Abstract (en)
[origin: EP1870370A1] A car and a counterweight are suspended within a hoistway by a main rope. A driving machine for moving the main rope to raise/lower the car and the counterweight is provided within the hoistway. The driving machine has a driving machine main body and a contact roller. The driving machine main body includes a rotor penetrated by the main rope serving as a penetration body. The contact roller is provided on the rotor, is in contact with the penetration body, and can rotate around a rotational shaft that is inclined with respect to a center line of the penetration body when the contact roller is vertically projected onto the penetration body. When the rotor is rotated, the contact roller is thereby so rolled as to leave a spiral trace on an outer peripheral surface of the penetration body while being in contact with the penetration body. When the contact roller is rolled while being in contact with the penetration body, the main rope is thereby moved with respect to the driving machine in a longitudinal direction of the main rope.

IPC 8 full level
B66B 11/04 (2006.01); **B66B 9/02** (2006.01); **B66B 11/00** (2006.01)

CPC (source: EP)
B66B 9/025 (2013.01); **B66B 11/009** (2013.01)

Citation (search report)

- [IA] US 3802290 A 19740409 - GROVE D, et al
- [XA] US 3215227 A 19651102 - MACCHESNEY CHESTER M
- [A] JP H10109851 A 19980428 - HITACHI LTD
- [A] WO 02072462 A1 20020919 - NIPPON ELEVATOR MFG CO LTD [JP], et al
- See references of WO 2006112017A1

Cited by
WO2017129850A1

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1870370 A1 20071226; EP 1870370 A4 20121003; EP 1870370 B1 20130821; CN 100581974 C 20100120; CN 101031495 A 20070905; JP WO2006112017 A1 20081127; WO 2006112017 A1 20061026

DOCDB simple family (application)
EP 05730468 A 20050414; CN 200580018169 A 20050414; JP 2005007224 W 20050414; JP 2007520992 A 20050414