

Title (en)
ELEVATOR APPARATUS

Title (de)
AUFZUGSVORRICHTUNG

Title (fr)
APPAREILLAGE D'ASCENSEUR

Publication
EP 1736431 A4 20091202 (EN)

Application
EP 04727367 A 20040414

Priority
JP 2004005289 W 20040414

Abstract (en)
[origin: EP1736431A1] An elevator apparatus has a car and a counterweight suspended by first and second main ropes. The first main rope has a first end portion connected to a first rope connecting portion of the car and a second end portion connected to the counterweight. The second main rope has a third end portion connected to a second rope connecting portion of the car and a fourth end portion connected to the counterweight. Of the first and second main ropes, only the first main rope is wrapped around a drive sheave of a driving machine. In the upper portion of a hoistway, there is provided a second main rope return pulley around which only the second main rope of the first and second main ropes is wrapped.

IPC 8 full level
B66B 7/06 (2006.01); **B66B 11/00** (2006.01)

CPC (source: EP)
B66B 11/008 (2013.01); **B66B 11/009** (2013.01)

Citation (search report)

- [XAY] EP 0905081 A2 19990331 - TOSHIBA KK [JP]
- [E] EP 1693330 A1 20060823 - MITSUBISHI ELECTRIC CORP [JP]
- [E] EP 1448470 A2 20040825 - INVENTIO AG [CH]
- [Y] US 2003155185 A1 20030821 - NOMURA MASAMI [JP], et al
- [Y] WO 9943596 A2 19990902 - OTIS ELEVATOR CO [US]
- [E] WO 2005080250 A1 20050901 - MITSUBISHI ELECTRIC CORP [JP], et al & US 2007170005 A1 20070726 - KIGAWA HIROSHI [JP], et al
- See references of WO 2005100225A1

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1736431 A1 20061227; EP 1736431 A4 20091202; EP 1736431 B1 20110323; CN 100387503 C 20080514; CN 1767997 A 20060503; DE 602004031981 D1 20110505; JP WO2005100225 A1 20070830; WO 2005100225 A1 20051027

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