

Title (en)  
ELEVATOR DEVICE

Title (de)  
AUFZUGSVORRICHTUNG

Title (fr)  
DISPOSITIF ASCENSEUR

Publication  
**EP 1396457 A4 20100217 (EN)**

Application  
**EP 01934514 A 20010604**

Priority  
JP 0104685 W 20010604

Abstract (en)  
[origin: EP1396457A1] An elevator apparatus according to the present invention is equipped with a car (3) that ascends and descends along a car rail (4) provided in a hoistway (1), a counterweight (6) that ascends and descends along a counterweight rail (7) provided in the hoistway (1), a hoisting machine (9) that has a sheave (10) and a motor (11) for driving the sheave (10), and is disposed at the top portion in the hoistway (1) such that a rotating surface of the sheave (10) is horizontal, first and second direction inverting pulleys (13, 14) disposed at the top portion of the hoistway (1), and a main rope (8) that has one end thereof connected to the car (3), while the other end thereof connected to the counterweight (6), and is wound onto the first and second direction inverting pulleys (13, 14) and the sheave (10) to suspend the car (3) and the counterweight (6). <IMAGE>

IPC 1-7  
**B66B 7/06**

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

CPC (source: EP KR)  
**B66B 11/0045** (2013.01 - EP); **B66B 11/008** (2013.01 - EP); **B66B 11/08** (2013.01 - KR)

Citation (search report)  
• [XY] EP 1018480 A2 20000712 - MITSUBISHI ELECTRIC CORP [JP]  
• [Y] JP 2001048450 A 20010220 - MITSUBISHI ELECTRIC CORP  
• [Y] EP 1078876 A2 20010228 - MITSUBISHI ELECTRIC CORP [JP]  
• See references of WO 02098782A1

Cited by  
EP1930283A4; WO2011072113A1

Designated contracting state (EPC)  
DE NL

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**EP 1396457 A1 20040310; EP 1396457 A4 20100217; EP 1396457 B1 20120725; CN 1302979 C 20070307; CN 1457315 A 20031119; JP 4934941 B2 20120523; JP WO2002098782 A1 20040916; KR 20030020969 A 20030310; WO 02098782 A1 20021212**

DOCDB simple family (application)  
**EP 01934514 A 20010604; CN 01812314 A 20010604; JP 0104685 W 20010604; JP 2002568879 A 20010604; KR 20037001615 A 20030204**