Title (en)

BRAKE DEVICE FOR ELEVATOR

Title (de

BREMSVORRICHTUNG FÜR AUFZUG

Title (fr)

DISPOSITIF DE FREINAGE POUR ASCENSEUR

Publication

EP 1923345 A4 20120307 (EN)

Application

EP 05781944 A 20050906

Priority

JP 2005016308 W 20050906

Abstract (en)

[origin: EP1923345A1] A brake device for an elevator is equipped with a rotating body, a braking body displaceable between a braking position at which the braking body is in contact with the rotating body and an open position at which the braking body is spaced apart from the rotating body, an urging body for urging the braking body in a direction in which the braking body is displaced to the braking position, an electromagnet having a first electromagnetic coil for generating an electromagnetic suction force through energization and a second electromagnetic coil for generating an electromagnetic suction force through energization so as to displace the braking body to the open position through generation of the electromagnetic suction forces against an urging force exerted by the urging body, and a brake control device for controlling energization of the first electromagnetic coil and energization of the second electromagnetic coil respectively. When the braking body, the brake control device performs different types of energization control for the first electromagnetic coil and the second electromagnetic coil. When being displaced between the braking position and the open position, the braking body yields due to the electromagnetic suction forces of the first electromagnetic coil and the second electromagnetic coil and the urging body. Thus, impact noise resulting from displacement of the braking body can be abated.

IPC 8 full level

B66B 1/32 (2006.01); B66B 5/02 (2006.01)

CPC (source: EP)

B66B 1/32 (2013.01); B66B 5/02 (2013.01); B66B 5/185 (2013.01)

Citation (search report)

- [YA] JP 2005126183 A 20050519 MITSUBISHI ELECTRIC CORP
- [YA] EP 1544148 A1 20050622 MITSUBISHI ELECTRIC CORP [JP]
- [A] EP 1431226 A1 20040623 MITSUBISHI ELECTRIC CORP [JP]
- · See references of WO 2007029310A1

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US9638272B2; CN103518073A; US2014048359A1; AU2012252276B2; US9637349B2; US8746413B2; WO2012152998A3; WO2020127517A1; EP2707618B1

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

EP 1923345 A1 20080521; **EP 1923345 A4 20120307**; **EP 1923345 B1 20131113**; CN 100562476 C 20091125; CN 101068737 A 20071107; JP 4925105 B2 20120425; JP WO2007029310 A1 20090312; WO 2007029310 A1 20070315

DOCDB simple family (application)

EP 05781944 A 20050906; CN 200580041133 A 20050906; JP 2005016308 W 20050906; JP 2006523465 A 20050906