

Title (en)
BRAKE DEVICE FOR ELEVATOR

Title (de)
BREMSVORRICHTUNG FÜR AUFZUG

Title (fr)
DISPOSITIF DE FREINAGE POUR ASCENSEUR

Publication
EP 1923345 A1 20080521 (EN)

Application
EP 05781944 A 20050906

Priority
JP 2005016308 W 20050906

Abstract (en)

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 force of 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)

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

Designated contracting state (EPC)
DE

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