

Title (en)
SAFETY DEVICE OF ELEVATOR

Title (de)
SICHERHEITSVORRICHTUNG FÜR AUFZUG

Title (fr)
DISPOSITIF DE SÉCURITÉ D'ÉLEVATEUR

Publication
EP 2154096 A4 20131225 (EN)

Application
EP 07744659 A 20070604

Priority
JP 2007061299 W 20070604

Abstract (en)
[origin: EP2154096A1] In a safety device for an elevator, a pair of brake mechanism bodies are provided to an elevating/lowering body guided by a pair of guide rails. Each brake mechanism body has a housing supported on the elevating/lowering body, a receiving brake shoe provided in the housing, and a movable brake shoe which is capable of approaching and receding from the guide rail. The movable brake shoe can be displaced between a neutral position where an interval with the receiving brake shoe becomes a predetermined distance, and brake positions located above and below the neutral position, in each of which the interval with the receiving brake shoe becomes narrower than the predetermined distance. The guide rail is individually held between the receiving brake shoe and the movable brake shoe in such a manner that, while contacting the guide rail, the movable brake shoe is displaced from the neutral position to the brake position corresponding to each moving direction of the elevating/lowering body. The respective brake mechanism bodies are coupled by a coupling member. An electromagnetic driver that displaces the coupling member in directions in which each of the movable brake shoes approaches and recedes from each of the guide rails is supported by the elevating/lowering body.

IPC 8 full level
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CPC (source: EP KR)
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Citation (search report)
• [YA] US 2002070082 A1 20020613 - MUFF JOSEF A [CH], et al
• [YA] EP 1431230 A1 20040623 - MITSUBISHI ELECTRIC CORP [JP]
• [Y] JP H10139303 A 19980526 - MITSUBISHI ELECTRIC CORP
• [Y] EP 1749784 A1 20070207 - MITSUBISHI ELECTRIC CORP [JP]
• [Y] EP 0985623 A2 20000315 - TOSHIBA KK [JP]
• [A] US 2007007083 A1 20070111 - HUSMANN JOSEF [CH]
• See references of WO 2008149413A1

Cited by
WO2011113754A1; AT514822A1; CN102791603A; EA030810B1; EP3421406A1; IT201700051961A1; US9169104B2; WO2012110273A1; EP2837592A1; US11866299B2; WO2011113753A2; US8991561B2

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