

Title (en)

SAFETY DEVICE AND METHOD FOR PREVENTING ACCIDENTS IN THE COMBPLATE AREA OF ESCALATORS OR MOVING WALKWAYS

Title (de)

SICHERHEITSVORRICHTUNG UND VERFAHREN ZUR VERHÜTUNG VON UNFÄLLEN IM KAMMPLATTENBEREICH VON FAHRTREPPEN ODER FAHRSTEIGEN

Title (fr)

DISPOSITIF DE SÉCURITÉ ET PROCÉDÉ DE PRÉVENTION DES ACCIDENTS DANS LA ZONE PLAQUE-PEIGNE D'ESCALIERS OU DE TROTTOIRS ROULANTS

Publication

**EP 3088346 A1 20161102 (EN)**

Application

**EP 15382207 A 20150427**

Priority

EP 15382207 A 20150427

Abstract (en)

Safety device and method for preventing accidents in the combplate area of escalators or moving walkways. The safety device comprises: - at least one capacitor (8), each one formed by a first capacitor plate in contact with a combplate (2) or floor plate of an escalator or moving walkway (1) and a second capacitor plate (9) connected to a reference voltage; - a capacitance measuring module (7) for measuring the capacitance (C) of the at least one capacitor (8), obtaining at least one capacitance signal (20); - a controller (6) configured for comparing each capacitance signal (20) with at least one predefined value (22) and, based on said comparison, deciding whether a dangerous situation has occurred, and in that case sending the escalator or moving walkway (1) a warning signal or a stop order signal. This safety device can detect when human skin is close to the combplate area to stop the escalator or moving walkway, and thus avoiding human body injuries.

IPC 8 full level

**B66B 29/06** (2006.01)

CPC (source: EP)

**B66B 29/06** (2013.01)

Citation (applicant)

- DE 29907184 U1 19990826 - THYSSEN FAHRTREPPEN GMBH [DE]
- WO 2014208906 A1 20141231 - MIJUHITEC CO LTD [KR]
- US 2007137979 A1 20070621 - SHEEHAN JOHN R [US], et al
- US 5718319 A 19980217 - GIH GIR [US]
- GB 1031967 A 19660602 - SCHWEIZ WAGONS AUFZUEGEFAB
- DE 10259149 A1 20040715 - KONE CORP [FI]
- WO 2014015870 A2 20140130 - THYSSENKRUPP FAHRTREPPEN GMBH [DE]
- JP H0873170 A 19960319 - MITSUBISHI ELECTRIC BILL TECH
- US 5611417 A 19970318 - STAWNIAK ANDRZEJ [AT], et al
- KR 20040016094 A 20040221 - OTIS ELEVATOR CO
- CN 101323412 A 20081217 - SUZHOU JIANGNAN JIAJIE ELEVATO [CN]
- US 2004134748 A1 20040715 - TADA SHINGO [JP]
- CN 202296792 U 20120704 - IFE ELEVATOR CO LTD
- DE 102011112528 A1 20130307 - HENNING TESTING SYSTEMS GMBH [DE]
- US 4800998 A 19890131 - MYRICK RONALD E [US]
- JP H11292451 A 19991026 - MITSUBISHI ELEC BUILDING TECHN
- CN 203922417 U 20141105 - SUZHOU DEAO ELEVATOR CO LTD
- US 2008252724 A1 20081016 - HORBRUEGGER HERBERT [DE], et al

Citation (search report)

- [XDAI] WO 2014015870 A2 20140130 - THYSSENKRUPP FAHRTREPPEN GMBH [DE]
- [XI] DE 727487 C1
- [XD] DE 10259149 A1 20040715 - KONE CORP [FI]
- [X] US 6520310 B1 20030218 - LAUCH RICHARD [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3088346 A1 20161102; CN 107592853 A 20180116; CN 107592853 B 20220201; WO 2016173770 A1 20161103**

DOCDB simple family (application)

**EP 15382207 A 20150427; CN 201680024140 A 20160318; EP 2016055935 W 20160318**