

Title (en)  
SAFETY DETECTION DEVICE OF PASSENGER CONVEYING APPARATUS AND IMPLEMENTATION METHOD THEREOF

Title (de)  
SICHERHEITSDETEKTIONSVORRICHTUNG FÜR EINE PASSAGIERFÖRDERUNGSVORRICHTUNG UND IMPLEMENTIERUNGSVERFAHREN  
DAFÜR

Title (fr)  
DISPOSITIF DE DÉTECTION DE SÉCURITÉ D'UN ÉQUIPEMENT DE TRANSPORT DE PASSAGERS ET PROCÉDÉ DE MISE EN UVRE DE CELUI-CI

Publication  
**EP 3026001 A4 20170329 (EN)**

Application  
**EP 13889832 A 20131113**

Priority  
• CN 201310320929 A 20130726  
• CN 2013087047 W 20131113

Abstract (en)  
[origin: EP3026001A1] This application discloses a safety detection device of passenger conveying equipment, which comprises: one or more kinds of marks provided on any of the low-speed rotary parts, at least one kind of the marks or the combination of various marks being distributed across 360 degrees on a tubular side or an annular bottom of at least one of the low-speed rotary parts for representing different rotation angles of the low-speed rotary parts; at least one optical sensor that is isolated from the low-speed rotary parts where the mark of the rotation angle is located and used for identifying the mark; and a controller connected with the sensor, used for calculating the step movement direction and/or step movement speed of the passenger conveying equipment according to the mark identified by the optical sensor at different times, and stopping movement of the passenger conveying equipment in case of the step inversion or speeding movement. This application covers various kinds of faults, and adopts non-contact optical detection means, thus improving its reliability and movement stability significantly.

IPC 8 full level  
**B66B 29/00** (2006.01); **B66B 23/00** (2006.01); **B66B 23/02** (2006.01); **B66B 23/06** (2006.01)

CPC (source: CN EP)  
**B66B 29/00** (2013.01 - CN); **B66B 29/005** (2013.01 - EP); **B66B 23/026** (2013.01 - EP); **B66B 23/06** (2013.01 - EP)

Citation (search report)  
• [I] GB 2263169 A 19930714 - OTIS ELEVATOR CO [US]  
• See references of WO 2015010392A1

Cited by  
JP2022028525A; US10737910B2; US11772938B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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**EP 13889832 A 20131113**; CN 2013087047 W 20131113; CN 201310320929 A 20130726; KR 20157018124 A 20131113