

Title (en)

DOOR PINCH DETECTION DEVICE, RAILWAY DOOR DEVICE AND PROGRAM

Title (de)

TÜREINKLEMMDETEKTIONSVORRICHTUNG, EISENBAHNTÜRANORDNUNG UND PROGRAMM

Title (fr)

DISPOSITIF DE DÉTECTION DE PINCEMENT DE PORTE, DISPOSITIF DE PORTE FERROVIAIRE ET PROGRAMME

Publication

**EP 3971380 A1 20220323 (EN)**

Application

**EP 21196860 A 20210915**

Priority

JP 2020155762 A 20200916

Abstract (en)

A door pinch detection device (1), for detecting door pinch when a door (3R, 3L) is driven in a closing direction by a driving force from a motor (11), includes a first obtaining unit (31) for obtaining a first current value indicating current flowing through the motor (11) in a first period while the door (3R, 3L) is closed, a threshold setting unit (32) for, based on the obtained first current value, setting a threshold value used to determine whether the door pinch has occurred, a second obtaining unit (33) for obtaining a second current value indicating current flowing through the motor (11) in a second period following the first period while the door (3R, 3L) is closed, and a determining unit (34) for determining whether the door pinch has occurred based on comparing the obtained second current value against the set threshold value.

IPC 8 full level

**E05F 15/41** (2015.01); **E05F 15/635** (2015.01)

CPC (source: EP)

**E05F 15/41** (2013.01); **E05F 15/635** (2015.01); **E05Y 2400/354** (2013.01); **E05Y 2400/554** (2013.01); **E05Y 2400/58** (2013.01); **E05Y 2800/73** (2013.01); **E05Y 2900/51** (2013.01)

Citation (search report)

- [I] DE 102020101656 A1 20200730 - NIDEC MOBILITY CORPORATION [JP]
- [XI] DE 19681592 B4 20040819 - OHI SEISAKUSHO CO LTD [JP]
- [I] GB 2447171 A 20080903 - CHAMBERLAIN GROUP INC [US]
- [I] DE 202008004451 U1 20090813 - BROSE FAHRZEUGTEILE [DE]
- [I] DE 102009028914 A1 20110303 - BOSCH GMBH ROBERT [DE]
- [X] EP 3235990 A1 20171025 - WESTINGHOUSE AIR BRAKE TECH CORP [US]

Cited by

US2021036649A1; US11476791B2

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 3971380 A1 20220323**; CN 114261409 A 20220401; JP 2022049525 A 20220329

DOCDB simple family (application)

**EP 21196860 A 20210915**; CN 202111082290 A 20210915; JP 2020155762 A 20200916