

Title (en)

STEP ASSISTING DEVICE FOR FOOTWEAR WALKING EQUIPMENT

Title (de)

SCHRITTHILFE FÜR SCHUHLAUFGERÜSTUNG

Title (fr)

DISPOSITIF D'ASSISTANCE DES PAS POUR EQUIPEMENT DE MARCHE POUR CHAUSSURE

Publication

EP 3238792 A1 20171101 (EN)

Application

EP 17168454 A 20170427

Priority

IT UA20162956 A 20160428

Abstract (en)

It is disclosed a step assistance device applied to a walking equipment that is adapted to be functionally connected to shoes worn by a user. The equipment comprises first and second substantially elongate plates, having binding means for connection with first and second shoes. The assistance device comprises respective slide guides and sliding units functionally connected to said guides. Particularly, the sliding units comprise a motor that drives them and a sensor, which are functionally associated with a control unit. In a stance phase, the sensor detects a load signal, and the control unit operates the motor for moving the sliding unit along the guide between a first rearward position and a second forward position, such that said first sliding unit, and hence the shoe will travel relative to the first plate. In a swing phase, the control unit operates the motor for moving the sliding unit between the forward position and the rearward position to bring the sliding unit back to the starting position. A battery for supplying power to the motor is fixed to the sliding unit and is manually removable.

IPC 8 full level

A63C 5/08 (2006.01); **A63C 9/00** (2012.01); **A63C 9/08** (2012.01); **A63C 13/00** (2006.01)

CPC (source: EP)

A63C 5/08 (2013.01); **A63C 9/003** (2013.01); **A63C 9/0807** (2013.01); **A63C 13/006** (2013.01); **A63C 2009/008** (2013.01);
A63C 2203/12 (2013.01)

Citation (search report)

- [Y] WO 2014205472 A1 20141231 - ATOMIC AUSTRIA GMBH [AT]
- [Y] US 2012297646 A1 20121129 - BRAULT JEAN [CA]
- [A] AT 382518 B 19870310 - MUELLER FRANZ [ST]
- [A] US 7159891 B1 20070109 - NIGGEMANN DALE [US]
- [A] AT 403659 B 19980427 - CREPAZ FRIEDRICH [AT]
- [A] DE 649153 C 19870816 - MARGARETHE KATZ GEB PHENN
- [A] FR 2296443 A1 19760730 - ZUBER DIDIER [FR]
- [A] US 5735063 A 19980407 - MC MANUS JOHN H [US]

Cited by

IT202200002609A1; CN110681145A

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 3238792 A1 20171101; EP 3238792 B1 20190227; DK 3238792 T3 20190520; ES 2727782 T3 20191018; SI 3238792 T1 20190731

DOCDB simple family (application)

EP 17168454 A 20170427; DK 17168454 T 20170427; ES 17168454 T 20170427; SI 201730050 T 20170427