

Title (en)

FLOOR CLEANING APPARATUS AND METHOD FOR CONTROLLING A FLOOR CLEANING APPARATUS

Title (de)

BODENREINIGUNGSGERÄT UND VERFAHREN ZUM STEUERN EINES BODENREINIGUNGSGERÄTES

Title (fr)

APPAREIL DE NETTOYAGE DE SOL ET PROCÉDÉ DE COMMANDE D'UN APPAREIL DE NETTOYAGE DE SOL

Publication

EP 4373376 A1 20240529 (DE)

Application

EP 21749172 A 20210723

Priority

EP 2021070747 W 20210723

Abstract (en)

[origin: WO2023001390A1] The invention relates to a self-propelled and self-steering floor cleaning apparatus comprising at least one functional unit (16) and a control unit (18) for controlling at least one functional unit (16), wherein the at least one functional unit (16) comprises a running gear (20) for travelling on a floor surface (12), at least one cleaning tool (22) for cleaning the floor surface (12), and a sensor unit (34) for detecting the surroundings of the floor cleaning apparatus (10), in particular during movement, and wherein the control unit (18) determines, depending on at least one signal of the sensor unit (34), that an obstacle (62) is located on or at the floor surface (12). In order to provide a floor cleaning apparatus of the type in question which has a higher operational reliability, according to the invention: the control unit (18) classifies the obstacles (62) with respect to persons (64) and objects (66); and the control unit (18) controls at least one functional unit (16) depending on the classification of a detected obstacle (62). The invention also relates to a method for controlling a self-driving and self-steering floor cleaning apparatus.

IPC 8 full level

A47L 11/40 (2006.01)

CPC (source: EP US)

A47L 11/4008 (2013.01 - US); **A47L 11/4061** (2013.01 - EP US); **A47L 11/4066** (2013.01 - US); **A47L 2201/04** (2013.01 - EP US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2023001390 A1 20230126; CN 117529265 A 20240206; EP 4373376 A1 20240529; JP 2024525952 A 20240712; US 2024164611 A1 20240523

DOCDB simple family (application)

EP 2021070747 W 20210723; CN 202180099637 A 20210723; EP 21749172 A 20210723; JP 2024503998 A 20210723; US 202418418460 A 20240122