

Title (en)

CLEANING DEVICE WITH A CLEANING ROLLER THAT CAN BE ROTATED ABOUT AN AXIS OF ROTATION

Title (de)

REINIGUNGSGERÄT MIT EINER UM EINE DREHACHSE ROTIERBAREN REINIGUNGSWALZE

Title (fr)

APPAREIL DE NETTOYAGE MUNI D'UN ROULEAU DE NETTOYAGE POUVANT TOURNER AUTOUR D'UN AXE DE ROTATION

Publication

EP 3313231 A1 20180502 (DE)

Application

EP 16729599 A 20160617

Priority

- DE 102015110025 A 20150623
- EP 2016064054 W 20160617

Abstract (en)

[origin: WO2016207077A1] The invention relates to a cleaning device (1), in particular a floor-cleaning device, comprising a cleaning roller (2) for processing a surface to be cleaned, which cleaning roller can be rotated about an axis of rotation (x). Said cleaning roller (2) is designed at least partly as a hollow body (3) having an internal liquid space (4). Said hollow body (3) has at least one hollow body opening (5, 10) for liquid to exit the liquid space (4). In order to devise a cleaning device in which liquid is conveyed from the liquid space to the surface of the hollow body under certain conditions only, the hollow body opening (5) is associated with a force-actuated automatic valve element (6) which, depending on the amount of centrifugal force acting upon the valve element (6) as a result of the rotation of the cleaning roller (2), can be moved to a closing position in which the hollow body opening (5) is closed and/or to an open position in which the hollow body opening (5) is exposed. The valve element (6) is designed to allow liquid to exit the liquid space (4) at a first speed (n1) of the cleaning roller (2) and to block liquid from exiting when the rotational speed increases, i.e. when a second speed (n2) which is higher than the first speed (n1) is reached.

IPC 8 full level

A46B 11/00 (2006.01); **A47L 11/40** (2006.01)

CPC (source: CN EP US)

A47L 11/14 (2013.01 - US); **A47L 11/4013** (2013.01 - US); **A47L 11/4041** (2013.01 - CN EP US); **A47L 11/4083** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2016207077A1

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)

DE 102015110025 A1 20161229; CN 107787199 A 20180309; CN 107787199 B 20201103; EP 3313231 A1 20180502; EP 3313231 B1 20190807; ES 2748373 T3 20200316; JP 2018518267 A 20180712; SG 11201710622X A 20180130; TW 201705895 A 20170216; TW I697314 B 20200701; US 10524631 B2 20200107; US 2018168418 A1 20180621; WO 2016207077 A1 20161229

DOCDB simple family (application)

DE 102015110025 A 20150623; CN 201680036500 A 20160617; EP 16729599 A 20160617; EP 2016064054 W 20160617; ES 16729599 T 20160617; JP 2017563260 A 20160617; SG 11201710622X A 20160617; TW 105119282 A 20160620; US 201615739212 A 20160617