

Title (en)

CLEANING DEVICE WITH A CLEANING ROLLER ROTATABLE AROUND A ROTATIONAL AXIS

Title (de)

REINUNGSGERÄT MIT EINER UM EINE DREHACHSE ROTIERBAREN REINIGUNSWALZE

Title (fr)

DISPOSITIF DE NETTOYAGE AVEC UN ROULEAU DE NETTOYAGE TOURNANT AUTOUR D'UN AXE DE ROTATION

Publication

EP 3282914 A1 20180221 (DE)

Application

EP 16715552 A 20160412

Priority

- DE 102015105598 A 20150413
- EP 2016057957 W 20160412

Abstract (en)

[origin: WO2016166075A1] 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), wherein the cleaning roller (2) is designed at least partially as a liquid-permeable hollow body (3) having an internal liquid space (4), wherein the hollow body (3) has openings (5) for liquid (6) to escape from the liquid space (4) to the surface (7) of the hollow body (3). In order to prevent an undesired escape or dripping of liquid, the cleaning roller (2) according to the invention is designed to block the escape of liquid (6) from the liquid space (4) below a minimum rotational speed (n_{min}) determined by a force balance between a capillary force (FK) and a centrifugal force (FZ) acting on the liquid and the escape of liquid (6) from the liquid space (4) is allowed once the minimum rotational speed (n_{min}) has been reached.

IPC 8 full level

A47L 11/30 (2006.01); **A47L 11/282** (2006.01); **A47L 11/40** (2006.01)

CPC (source: CN EP)

A47L 11/282 (2013.01 - CN EP); **A47L 11/302** (2013.01 - CN); **A47L 11/4041** (2013.01 - CN EP); **A47L 11/4088** (2013.01 - EP)

Citation (search report)

See references of WO 2016166075A1

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 102015115151 A1 20161013; CN 107405038 A 20171128; EP 3282914 A1 20180221; EP 3282914 B1 20190612; ES 2743793 T3 20200220; JP 2018511360 A 20180426; TW 201700057 A 20170101; TW I692339 B 20200501; WO 2016166075 A1 20161020

DOCDB simple family (application)

DE 102015115151 A 20150909; CN 201680019376 A 20160412; EP 16715552 A 20160412; EP 2016057957 W 20160412; ES 16715552 T 20160412; JP 2017543347 A 20160412; TW 105111333 A 20160412