

Title (en)

Apparatus and method for the cleaning of wall or floor surfaces

Title (de)

Vorrichtung und Verfahren zur Reinigung von Wand- oder Bodenflächen

Title (fr)

Dispositif et procédé de nettoyage de surfaces de murs ou de sols

Publication

EP 2653614 A3 20151111 (DE)

Application

EP 13401034 A 20130409

Priority

DE 102012103381 A 20120418

Abstract (en)

[origin: EP2653614A2] The device (1) has multiple air nozzles (4) arranged on two sides of a suction opening, and air guide elements (7) positionable adjacent to the suction opening for cleaning a surface. The guide elements deflect supplied pressurized air between the surface and the guide elements in a direction parallel to the surface after the pressurized air impinges on the surface. The guide elements are positionable parallel to the surface, and the air nozzles are arranged at a common retainer (3) and exhibit a distance of about 150 mm from the suction opening transverse to a suction direction.

IPC 8 full level

E01H 1/00 (2006.01); **E01H 1/08** (2006.01); **E01H 8/10** (2006.01)

CPC (source: EP US)

B08B 5/02 (2013.01 - US); **E01H 1/005** (2013.01 - EP US); **E01H 1/0863** (2013.01 - EP US); **E01H 8/105** (2013.01 - EP US)

Citation (search report)

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- [YD] DE 9203164 U1 19920507
- [I] JP 2003313840 A 20031106 - HOWA MACHINERY LTD

Cited by

CN108360424A; EP3680390A1; US10167600B2; EP3418450A1; US10850313B2

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 2653614 A2 20131023; **EP 2653614 A3 20151111**; **EP 2653614 B1 20161214**; CA 2813213 A1 20131018; CA 2813213 C 20151201; CN 103422457 A 20131204; DE 102012103381 A1 20131024; JP 2013220424 A 20131028; RU 2013117849 A 20141027; RU 2532272 C1 20141110; US 2013276838 A1 20131024; US 9089879 B2 20150728

DOCDB simple family (application)

EP 13401034 A 20130409; CA 2813213 A 20130417; CN 201310321236 A 20130418; DE 102012103381 A 20120418; JP 2013086695 A 20130417; RU 2013117849 A 20130417; US 201313864346 A 20130417