

Title (en)

Suction hose coupling device

Title (de)

Vorrichtung zur Anordnung eines Saugvorsatzes

Title (fr)

Embout de raccordement de tuyau d'aspirateur

Publication

EP 1647219 A3 20070314 (DE)

Application

EP 05018243 A 20050823

Priority

- DE 102004050471 A 20041016
- DE 102004052306 A 20041028

Abstract (en)

[origin: EP1647219A2] A swivel element (SE) (2) fits on a suction adapter so as to swivel and links to a corresponding turning element (TE) as a link to a vacuum/floor cleaner so as to make a link with a turning motion. The SE and TE intermesh and have interlocking grooves running round in an SE/TE connection area so as to hold sections and form a guiding/retaining ring.

IPC 8 full level

A47L 9/24 (2006.01)

CPC (source: EP US)

A47L 9/02 (2013.01 - EP US)

Citation (search report)

- [X] JP H11206654 A 19990803 - TOSHIBA TEC KK
- [A] JP 2004230043 A 20040819 - TOSHIBA TEC KK
- [A] FR 2827755 A1 20030131 - WESSEL WERK GMBH [DE]
- [A] US 3239244 A 19660308 - ERIC LEINFELT KARL

Cited by

EP2452600A1; EP2030550A3; CN102038455A; US8813308B2; WO2011045580A1; WO2009125185A1; US8336165B2; EP2030550A2; US8429791B2; US8201302B2; US9326653B2; US8186007B2; US8272097B2; US8438699B2; US8181309B2; US8595897B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1647219 A2 20060419; EP 1647219 A3 20070314; EP 1647219 B1 20080723; AT E401819 T1 20080815; CA 2523614 A1 20060416; CA 2523614 C 20130716; DE 102004052306 A1 20060420; DE 502005004787 D1 20080904; US 2006080803 A1 20060420; US 7503098 B2 20090317

DOCDB simple family (application)

EP 05018243 A 20050823; AT 05018243 T 20050823; CA 2523614 A 20051017; DE 102004052306 A 20041028; DE 502005004787 T 20050823; US 25315805 A 20051017