

Title (en)
Vacuum cleaner suction hose

Title (de)
Staubsauger-Saugrohr

Title (fr)
Tuyau d'aspiration pour aspirateur

Publication
EP 2606801 A3 20170322 (DE)

Application
EP 12196793 A 20121212

Priority
DE 102011121350 A 20111219

Abstract (en)
[origin: EP2606801A2] The suction tube (1) has a locking device (4) fixed to an outer pipe (3) and provided with a rack (6) held in engagement with a toothed rack (5) of an inner tube (2) in locking position. The rack (6) is set to release position by a relative force between the outer pipe and inner pipe (2) without influence of spring force, when locking device is displaced relative to outer tube to release portion. The tooth flanks of teeth of rack (6) is pushed by tooth flanks of teeth of rack (6) along upward direction at engagement state such that inner pipe is movable relative to outer pipe.

IPC 8 full level
A47L 9/24 (2006.01)

CPC (source: EP US)
A47L 9/24 (2013.01 - US); **A47L 9/244** (2013.01 - EP US)

Citation (search report)

- [X] DE 19706210 A1 19980820 - FROH CARL GMBH [DE]
- [X] WO 2004049891 A1 20040617 - YAKICI ISMAIL [TR]
- [X] WO 2005082222 A1 20050909 - EUNSUNG ELECTRONICS CO LTD [KR], et al
- [X] DE 20103442 U1 20010823 - KWANG DONG PREC CO [KR]

Cited by
CN104274122A

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 2606801 A2 20130626; EP 2606801 A3 20170322; EP 2606801 B1 20210113; CN 103340588 A 20131009; CN 103340588 B 20170908; DE 102012024351 A1 20130620; US 2013175794 A1 20130711; US 9351621 B2 20160531

DOCDB simple family (application)
EP 12196793 A 20121212; CN 201210599461 A 20121219; DE 102012024351 A 20121213; US 201213719268 A 20121219