

Title (en)

Suction device able to be associated, in fixed or removable manner, with a cleaning apparatus

Title (de)

Saugvorrichtung mit festem oder abnehmbarem Anbau an einem Reinigungsgerät

Title (fr)

Dispositif d'aspiration pouvant être associé, de manière fixe ou amovible, à un appareil de nettoyage

Publication

EP 1407705 A3 20041124 (EN)

Application

EP 03103699 A 20031006

Priority

IT UD20020209 A 20021009

Abstract (en)

[origin: EP1407705A2] Cleaning device (10) coupled, in fixed or removable manner, with a cleaning apparatus and comprising a supporting element (12) having a suction unit (14) and a delivery unit (16) to deliver a detergent fluid under pressure, and connection elements (28) that connect the supporting element (12) to the cleaning apparatus. The connection means (28) selectively position the supporting element (12) in a first stable operating position, wherein the delivery unit (16) is arranged at the front, in a determinate working direction, with respect to the suction unit (14), or in a second stable operating position, wherein the suction unit (14) is arranged at the front with respect to the delivery unit (16). <IMAGE>

IPC 1-7

A47L 9/02; **A47L 11/34**

IPC 8 full level

A47L 9/02 (2006.01); **A47L 11/34** (2006.01)

CPC (source: EP)

A47L 9/02 (2013.01); **A47L 11/34** (2013.01); **A47L 11/4044** (2013.01)

Citation (search report)

- [A] WO 0121054 A1 20010329 - GISOWATT S P A [IT], et al
- [A] EP 1216642 A1 20020626 - NILFISK ADVANCE AS [DK]
- [A] US 5867861 A 19990209 - KASEN TIMOTHY E [US], et al
- [A] US 5613271 A 19970325 - THOMAS PAUL-GERHARD [DE]
- [A] EP 0684006 A1 19951129 - KWANGJU ELECTRONICS CO LIMITED [KR]
- [A] US 4521935 A 19850611 - JOHNSTON CHARLES R [US], et al

Cited by

US11484174B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1407705 A2 20040414; **EP 1407705 A3 20041124**; **EP 1407705 B1 20070606**; AT E363857 T1 20070615; DE 60314213 D1 20070719; DE 60314213 T2 20080207; ES 2287411 T3 20071216; IT UD20020209 A1 20040410

DOCDB simple family (application)

EP 03103699 A 20031006; AT 03103699 T 20031006; DE 60314213 T 20031006; ES 03103699 T 20031006; IT UD20020209 A 20021009