

Title (en)
Liquid dispersing and suction device

Title (de)
Saug- und Austraggerät für eine Spülflüssigkeit

Title (fr)
Appareil d'aspiration et distribution de liquide

Publication
EP 0941828 A3 20020116 (DE)

Application
EP 99810124 A 19990212

Priority
DE 19810912 A 19980313

Abstract (en)
[origin: EP0941828A2] One (1) of the at least two air tight and watertight enclosed containers has a vacuum generator (6), and suction appliance (3). The second container (2) has an appliance (7) for producing excess pressure, and is connected to a discharge appliance (4). The two containers are joined by a pipe (5). The second container contains a ceramic filter element (8) with pores in.

IPC 1-7
B28D 7/02; B01D 21/02; B01D 39/20; B23Q 11/10; B23Q 11/00

IPC 8 full level
A47L 7/00 (2006.01); **A47L 9/18** (2006.01); **B01D 21/02** (2006.01); **B01D 21/24** (2006.01); **B01D 39/20** (2006.01); **B23B 51/06** (2006.01); **B23Q 11/00** (2006.01); **B23Q 11/10** (2006.01); **B28D 1/02** (2006.01); **B28D 7/02** (2006.01); **E21B 21/06** (2006.01)

CPC (source: EP US)
B28D 7/02 (2013.01 - EP US)

Citation (search report)

- [XA] US 5601659 A 19970211 - ROHRBACHER RICHARD D [US]
- [XA] US 5104529 A 19920414 - BECKER ROGER T [US]
- [X] US 5477844 A 19951226 - MEISTER DONALD F [US]
- [A] DE 3545328 A1 19870625 - HILTI AG [LI]
- [A] US 5223155 A 19930629 - GINN MICHAEL W [US], et al
- [A] GB 2277885 A 19941116 - WAKEMAN RICHARD JOHN [GB], et al
- [A] US 5417851 A 19950523 - YEE SKIPPER K [US]
- [A] US 3598446 A 19710810 - HATCHER CECIL W
- [DA] EP 0776627 A2 19970604 - KAERCHER GMBH & CO ALFRED [DE]

Cited by
EP2335897A1; EP2335896A1; DE102009055011A1; EP2335895A1; DE102009054962A1; CN108504339A; EP1193026A1; EP1386706A1; US7341659B2; WO2013093191A1; DE102009054963A1; DE202009018606U1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0941828 A2 19990915; **EP 0941828 A3 20020116**; **EP 0941828 B1 20040804**; AT E272477 T1 20040815; CA 2262304 A1 19990913; CA 2262304 C 20040817; DE 19810912 A1 19990916; DE 59910089 D1 20040909; ES 2224582 T3 20050301; JP 4080626 B2 20080423; JP H11311083 A 19991109; US 6126822 A 20001003

DOCDB simple family (application)
EP 99810124 A 19990212; AT 99810124 T 19990212; CA 2262304 A 19990218; DE 19810912 A 19980313; DE 59910089 T 19990212; ES 99810124 T 19990212; JP 6164199 A 19990309; US 26547199 A 19990310