

Title (en)
SUCTION DEVICE

Title (de)
ABSAUGVORRICHTUNG

Title (fr)
DISPOSITIF D'ASPIRATION

Publication
EP 0675987 B1 19990721 (DE)

Application
EP 94931539 A 19941021

Priority

- DE 4335945 A 19931022
- EP 9403469 W 19941021

Abstract (en)
[origin: WO9511354A2] The invention concerns a suction device (10) for sucking liquid out of a ventilated sewage-storage tank by means of an underpressure produced by the suction device linked to the sewage tank. The device comprises a remotely or hand-operated control valve (40), a first shut-off valve (30), such as a diaphragm valve, which is connected to the control valve and cuts in and out the underpressure required for the suction process, plus optionally a second shut-off valve disposed between the tank and the suction device and actuated by the underpressure. In order to be able to suck sewage out of the tank, irrespective of whether a second shut-off valve is fitted between the tank and the suction device, the suction device (10) has sensor elements (18, 24) which permit the presence or absence of the second shut-off valve to be determined and which permit the first shut-off valve to be controlled, directly or indirectly, by the control valve.

IPC 1-7
E03F 1/00; F16K 11/048

IPC 8 full level
E03F 7/00 (2006.01); **B61D 35/00** (2006.01); **B63B 29/16** (2006.01); **B63B 57/00** (2006.01); **E03F 1/00** (2006.01); **F04F 3/00** (2006.01);
F16K 11/048 (2006.01)

CPC (source: EP)
B61D 35/002 (2013.01); **B63B 29/16** (2013.01); **E03F 1/006** (2013.01)

Cited by
DE102014100797A1; DE102014100797B4; CN103328300A; US9347211B2

Designated contracting state (EPC)
BE CH DE FR GB LI NL SE

DOCDB simple family (publication)
DE 4335945 A1 19950504; DE 4335945 C2 19970710; AU 8059194 A 19950508; DE 59408521 D1 19990826; EP 0675987 A1 19951011;
EP 0675987 B1 19990721; JP H08505202 A 19960604; WO 9511354 A2 19950427; WO 9511354 A3 19950727

DOCDB simple family (application)
DE 4335945 A 19931022; AU 8059194 A 19941021; DE 59408521 T 19941021; EP 9403469 W 19941021; EP 94931539 A 19941021;
JP 51134094 A 19941021