Title (en)

FLEXIBLE TUBE PUMP

Publication

EP 0130374 A3 19850417 (DE)

Application

EP 84106168 A 19840530

Priority

DE 3320091 A 19830603

Abstract (en)

[origin: US4540350A] A stricture pump (30) comprising a casing (31) containing a delivery hose (32), a rotor (33) and a band-like dividing member (34) which is substantially stable in respect of length, and which is fastened to a fastening part (53, 55, 57) outside the outermost periphery of the rotor, in such a manner as to be fixed to the casing, and in addition is disposed around the rotor. Together with the casing walls, the dividing member closes off sealingly a suction chamber (38.1). On the rotation of the rotor, this closed-off suction chamber is increased in size, whereby a negative pressure is produced in it. Fluid is thereby forced from a suction branch (45) into that portion of the hose which lies within the suction chamber. On the further rotation of the rotor, the fluid drawn in is pressed out of the hose by rollers (52) on the rotor, these rollers pressing by way of the dividing member (34) against the hose disposed between the dividing member and the peripheral wall (37) of the casing. The hose has substantially no restoring power of its own, and therefore draws in fluid not through its own restoring power but through the negative pressure in the suction chamber. A stricture pump of this kind can be operated at a very high speed of rotation, so that high output can be achieved.

IPC 1-7

F04B 43/12

IPC 8 full level

F04B 43/12 (2006.01); F04C 5/00 (2006.01)

CPC (source: EP US)

F04B 43/1253 (2013.01 - EP US)

Citation (search report)

- GB 190413261 A 19050525 SCHANSCHIEFF ALEXANDER
- US 3180272 A 19650427 BROADFOOT JOHN T
- AT 179971 B 19541025 LEHNER JOSEF
- GB 1244054 A 19710825 LUTZ OTTO [DE]
- US 2899905 A 19590818
- FR 1319159 A 19630222
- FR 1394047 A 19650402
- DE 1013172 B 19570801 HERWARTH REICH DIPL ING

Cited by

GB2290582A; US5049048A; FR2598182A1; GB2285837A; US5646727A; GB2285837B; WO9001638A1; WO8805868A3; WO2018172217A1; US11486382B2

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

**US 4540350 A 19850910**; AT E22159 T1 19860915; DE 3320091 A1 19841206; DE 3460686 D1 19861016; EP 0130374 A2 19850109; EP 0130374 A3 19850417; EP 0130374 B1 19860910; JP H0694873 B2 19941124; JP S6079188 A 19850504

DOCDB simple family (application)

**US 61001184 Å 19840514**; AT 84106168 T 19840530; DE 3320091 A 19830603; DE 3460686 T 19840530; EP 84106168 A 19840530; JP 11435684 A 19840604