

Title (en)
FLEXIBLE TUBE PUMP

Publication
EP 0130374 B1 19860910 (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.

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IPC 8 full level
F04C 5/00 (2006.01); **F04B 43/12** (2006.01)

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

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