

Title (en)  
APPARATUS FOR CLEARING OBSTRUCTED FLUID PASSAGEWAYS

Publication  
**EP 0392113 B1 19930804 (EN)**

Application  
**EP 89308668 A 19890825**

Priority  
US 33576189 A 19890410

Abstract (en)  
[origin: EP0392113A2] Apparatus for clearing obstructed fluid passageways has a control manifold (10) with first and second inlets (28, 24) to a pressure source and a vacuum source and an inlet/outlet port (42) for connection to the obstructed passageway. An interior chamber (40) is divided into a pressure chamber (34) communicating with the first inlet (28) and a vacuum chamber (32) communicating with the second inlet (24). A displaceable member (62) in alternate positions thereof communicates between the vacuum chamber (32) and said inlet/outlet port (42), and between the pressure chamber (34) and said inlet/outlet port (42). Displacing means (52) moves the displaceable member (62) between its positions thereby connecting the port (42) sequentially to either the pressure chamber (34) or the vacuum chamber (32). This displacing means (52) also simultaneously connects the other of the pressure chamber (34) and vacuum chamber (32) to atmosphere via a porting means (50, 48).

IPC 1-7  
**A47L 7/00; B08B 9/02; E03C 1/308; E04H 4/12**

IPC 8 full level  
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Cited by  
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