

Title (en)  
Positive displacement pumps

Title (de)  
Verdrängungspumpe

Title (fr)  
Pompes à déplacement positif

Publication  
**EP 0830934 A3 19980805 (EN)**

Application  
**EP 97202514 A 19911224**

Priority  
• EP 93201194 A 19911224  
• US 63345590 A 19901224

Abstract (en)  
[origin: EP0496170A2] A positive displacement pump having single or twin crews (2) is disclosed in which the screw flights (34,36,38,40) are formed in the outer surfaces thereof with balancing holes (82) which can be filled with material less dense than that of the screw flights which can each be closed by a cap (84) having an outer surface which is flush with the outer surface of the adjoining flight. Also disclosed for the or each screw flight is a wear measuring port (86) in which a measuring device can be inserted to measure relative wear between the corresponding screw flight and the pump casing. Alternatively a proximity sensor (98) can be located in the measuring port so that wear of the corresponding flight can be dynamically sensed during pump operation. Additionally, the provision of wear strips (122) on the outer surface of and of less than half the width of the screw flight are disclosed as is a fluid pressure feedback control system (119) for the or each screw flight which reduces the pressure differential over a part of the discharge end of each flight. <IMAGE>

IPC 1-7  
**B29D 30/00**

IPC 8 full level  
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Citation (search report)  
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