

Title (en)

BYPASS VALVE FOR PUMPS AND HEATING INSTALLATIONS

Publication

EP 0000012 B1 19800109 (DE)

Application

EP 78100020 A 19780601

Priority

- DE 2725044 A 19770603
- DE 7802444 U 19780127

Abstract (en)

[origin: CA1087491A] A bypass valve with a tubular housing having an inlet at one end, a main outlet at the other end and a bypass outlet between the ends. A larger-diameter valving element controls the flow of fluid from the inlet to the main outlet, and a smaller-diameter valving element which is coaxial with the larger-diameter valving element controls the flow of fluid from the interior of the housing to the bypass outlet. The valving elements are mounted on a rod which confines them to movement in and counter to the direction of fluid flow from the inlet to the main outlet. Each valving element is movable by the fluid to an infinite number of positions in each of which they permit the fluid to flow to the respective outlets at a different rate. The smaller-diameter valving element is movable against an annular seat to seal the bypass outlet from the interior of the housing. The larger-diameter valving element is reciprocable in a tapering section of the housing so as to allow for continuous flow of fluid between the inlet and the main outlet. The rod is rigidly connected to the valving elements.

IPC 1-7

F16K 11/04; **F16K 15/06**

IPC 8 full level

F16K 11/04 (2006.01); **F16K 15/06** (2006.01)

CPC (source: EP US)

F16K 11/04 (2013.01 - EP US); **F16K 15/06** (2013.01 - EP); **F16K 15/063** (2013.01 - EP); **F16K 15/065** (2021.08 - US); **Y10T 137/2582** (2015.04 - EP US); **Y10T 137/2584** (2015.04 - EP US); **Y10T 137/2587** (2015.04 - EP US); **Y10T 137/2592** (2015.04 - EP US)

Cited by

US4243064A; USRE33712E; US4872474A; EP2443369A4; EP0223696A1; FR2589972A1; US4870985A; GB2154707A; GB2608863A; WO2010148005A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0000012 A1 19781220; **EP 0000012 B1 19800109**; CA 1087491 A 19801014; DD 136525 A5 19790711; DK 155457 B 19890410; DK 155457 C 19891023; DK 246578 A 19781204; FI 781713 A 19781204; NO 781925 L 19781205; US 4243064 A 19810106

DOCDB simple family (application)

EP 78100020 A 19780601; CA 304649 A 19780602; DD 20576878 A 19780602; DK 246578 A 19780602; FI 781713 A 19780530; NO 781925 A 19780602; US 89834078 A 19780420