

Title (en)
Pipe disconnector with enhanced sealing force

Title (de)
Dichtkraftverstärkter Rohrtrenner

Title (fr)
Disjoncteur hydraulique avec étanchéité renforcée

Publication
EP 1793176 A3 20081224 (DE)

Application
EP 06120358 A 20060908

Priority
DE 102005049110 A 20051011

Abstract (en)
[origin: US2007079873A1] A system disconnector for physically disconnecting an upstream liquid system from a downstream liquid system by means of a release valve (34) in response to a pressure drop between the upstream and downstream liquid system, with an upstream backflow preventer (40), a downstream backflow preventer (64) and a release valve body (18) in the form of a piston which is, regarding the flow, arranged between the backflow preventers (40, 64), an inlet pressure of the upstream liquid system upstream from the upstream backflow preventer (40), a middle pressure in a middle pressure space (66) between the release valve body (18) and the downstream backflow preventer (64) and an outlet pressure of the downstream liquid system downstream of the downstream backflow preventer (64), wherein a pressure difference between the inlet pressure and the middle pressure counteracts a spring (60) biasing the release valve body in the opening direction and wherein the release valve body (18) has an effective pressurized surface (d) which is smaller than the surface effective for the inlet pressure whereby a hollow space (74) is defined by the release valve body and the hollow space is connected to the middle pressure space (66) wherein a shiftable seat (76) adapted to be moved in the moving direction of the release valve body is provided in the hollow space (74), movable with respect to the release valve body up to a casing fixed stop (84) which is arranged in the flow direction upstream of the valve seat (32) of the release valve (34).

IPC 8 full level
F24D 3/10 (2006.01)

CPC (source: EP US)
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Y10T 137/7841 (2015.04 - EP US)

Citation (search report)
[A] EP 0088861 A2 19830921 - LANG APPARATEBAU GMBH [DE]

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