

Title (en)  
Pipe disconnecter 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 disconnecter 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)  
**F24D 3/10** (2013.01 - EP US); **F24D 3/1083** (2013.01 - EP US); **Y10T 137/2617** (2015.04 - EP US); **Y10T 137/3331** (2015.04 - EP US); **Y10T 137/7841** (2015.04 - EP US)

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

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AL BA HR MK RS

DOCDB simple family (publication)  
**US 2007079873 A1 20070412; US 7575016 B2 20090818**; AU 2006222658 A1 20070426; AU 2006222658 B2 20110317; DE 102005049110 A1 20070419; DE 102005049110 B4 20070531; EP 1793176 A2 20070606; EP 1793176 A3 20081224; EP 1793176 B1 20121219; ES 2400579 T3 20130410; PL 1793176 T3 20130430; ZA 200608089 B 20071227

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