

Title (en)
High pressure valve assembly

Title (de)
Hochdruckventilanordnung

Title (fr)
Agencement de soupape haute pression

Publication
EP 2085613 B1 20180815 (DE)

Application
EP 09150286 A 20090109

Priority
DE 202008001458 U 20080201

Abstract (en)
[origin: EP2085613A2] The arrangement (3) has a valve body (6) projecting into a flange (2) and sealing the flange using a static ring sealant (7). The valve body forms a suction valve with a closing body (8) at a side, and forms a pressure valve with a plunger (13) at its opposite side. The closing body and the plunger are axially movably supported in a spring-loaded manner. A channel (10) discharges into a pressure chamber (12) at the pressure-side, where the pressure chamber is provided in the valve body and extends in an axial direction of the plunger above a lower edge of the ring sealant.

IPC 8 full level
F04B 1/04 (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP US)
F04B 1/0452 (2013.01 - EP US); **F04B 53/1022** (2013.01 - EP US); **F04B 53/109** (2013.01 - EP US); **Y10T 137/88062** (2015.04 - EP US)

Citation (opposition)
Opponent : Alfred Kärcher SE & Co. KG
• US 5605449 A 19970225 - REED GLEN E [US]
• DE 3404520 A1 19850814 - URACA PUMPEN [DE]
• DE 19604132 A1 19970807 - HAMMELMANN PAUL MASCHF [DE]
• US 3820922 A 19740628 - BUSE F, et al
• US 3526246 A 19700901 - LEITGEB ANTON
• US 4111392 A 19780905 - EDELMANN GUNTHER
• US 6453010 B1 20020917 - MILLER THOMAS R [US], et al

Cited by
DE102018112735B3; DE102021125450A1; WO2023052051A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 202008001458 U1 20080327; DK 2085613 T3 20181203; EP 2085613 A2 20090805; EP 2085613 A3 20131218; EP 2085613 B1 20180815; ES 2689916 T3 20181116; PL 2085613 T3 20190329; US 2009194717 A1 20090806; US 8240634 B2 20120814

DOCDB simple family (application)
DE 202008001458 U 20080201; DK 09150286 T 20090109; EP 09150286 A 20090109; ES 09150286 T 20090109; PL 09150286 T 20090109; US 36262409 A 20090130