

Title (en)

GAS INJECTION VALVE WITH TWO POSITIONS OF CLOSURE

Title (de)

GASEINLASSVENTIL MIT ZWEI VERSCHLUSSPOSITIONEN

Title (fr)

VALVE DE CHARGE EN GAZ A DEUX POSITIONS DE FERMETURE

Publication

EP 1974160 A1 20081001 (FR)

Application

EP 07702833 A 20070117

Priority

- EP 2007000379 W 20070117
- FR 0600410 A 20060117

Abstract (en)

[origin: WO2007082729A1] Gas, especially carbon dioxide gas, injection valve comprising a seat (1) pierced by a channel (3), a pin (5) able to move inside the channel (3) against the compression of a return spring (7) bearing on the seat, and an elastomer seal (9) compressed between the seat (1) and the pin (5) to close the channel (3) when the pin (5) is moved to a first or low-pressure position of closure. In the invention, a thermoplastic seal (11) is mounted on the seat (1) or on the pin (5) to close the channel (3) when the thermoplastic seal (11) is compressed between the seat (1) and the pin (5) in a second or high pressure position of closure, against a supplementary compression of the elastomer seal (9).

IPC 8 full level

F16K 1/46 (2006.01)

CPC (source: EP US)

F16K 1/303 (2013.01 - EP US); **F16K 1/443** (2013.01 - EP US); **F16K 1/465** (2013.01 - EP US)

Citation (search report)

See references of WO 2007082729A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2896293 A1 20070720; FR 2896293 B1 20100813; CN 101371066 A 20090218; EP 1974160 A1 20081001; JP 2009523975 A 20090625; US 2010038573 A1 20100218; US 8087642 B2 20120103; WO 2007082729 A1 20070726

DOCDB simple family (application)

FR 0600410 A 20060117; CN 200780002484 A 20070117; EP 07702833 A 20070117; EP 2007000379 W 20070117; JP 2008550679 A 20070117; US 16081007 A 20070111