

Title (en)

THROTTLING VALVE

Publication

EP 0477299 A4 19930428 (EN)

Application

EP 90912048 A 19900521

Priority

US 36592489 A 19890614

Abstract (en)

[origin: WO9015944A2] A throttling valve (10) which prevents the deterioration of valve surfaces. The claimed invention comprises a casing having an inlet conduit (13) for introducing a liquid or gas medium into said valve, a conically expanding outlet (15) conduit for expelling liquid or gas out of said casing, and a valve bore (16) for supporting a retractable valve member (26); annular sealing means (32) situated within said housing between said inlet and outlet ports; and a retractable valve member (26) for opening and closing flow between the inlet and outlet conduits, said valve (26) having a contoured nose (42) which slidingly mates with said sealing means, said nose being contoured to direct the flow toward the center of said outlet conduit, said contour (42) being defined by an exponential equation whereby vaporization and cavitation of said liquid occurs away from the plug and walls of said outlet conduit.

IPC 1-7

F16K 1/08; F16K 1/10; F16K 25/04

IPC 8 full level

F16K 1/38 (2006.01); **F16K 25/04** (2006.01); **F16K 47/04** (2006.01)

CPC (source: EP KR)

F16K 1/08 (2013.01 - KR); **F16K 1/385** (2013.01 - EP); **F16K 25/04** (2013.01 - EP); **F16K 47/04** (2013.01 - EP)

Citation (search report)

- [X] DE 3233445 A1 19840315 - BASF AG [DE]
- [X] US 3703273 A 19721121 - ILLING HENRY
- [A] EP 0079147 A1 19830518 - BRITISH NUCLEAR FUELS PLC [GB]
- See references of WO 9015944A2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9015944 A2 19901227; WO 9015944 A3 19920529; AU 6160690 A 19910108; AU 640678 B2 19930902; BR 9007442 A 19920616; CA 2016800 A1 19901214; CN 1023343 C 19931229; CN 1048093 A 19901226; EP 0477299 A1 19920401; EP 0477299 A4 19930428; ES 2025391 A6 19920316; FI 915872 A0 19911213; HU 906770 D0 19920428; HU T63236 A 19930728; JP H05502283 A 19930422; KR 920701729 A 19920812

DOCDB simple family (application)

US 9002767 W 19900521; AU 6160690 A 19900521; BR 9007442 A 19900521; CA 2016800 A 19900515; CN 90104440 A 19900614; EP 90912048 A 19900521; ES 9001557 A 19900606; FI 915872 A 19911213; HU 677090 A 19900521; JP 51126390 A 19900521; KR 910700119 A 19910131