

Title (en)
Unit type expansion valve

Title (de)
Entspannungsventileinheit

Title (fr)
Vanne de détente unitaire

Publication
EP 0691517 B1 19990901 (EN)

Application
EP 95110177 A 19950629

Priority
JP 14757894 A 19940629

Abstract (en)
[origin: EP0691517A1] In a unit-type expansion valve (10) a barrel-shaped valve casing (11) is provided to penetrate a high-pressure refrigerant passage (12) and a low-pressure refrigerant passage (13) sideways. The inside diameter of the low-pressure refrigerant passage (13) is not smaller than inside diameter of the high-pressure refrigerant passage (12). A unit (15) is inserted into the valve casing (12) from the side of the lower-pressure refrigerant passage (13). Said unit (15) is integrally composed of a thermo-sensitive chamber (20) and a valve mechanism (30). The thermal-sensitive chamber (20) is disposed in the opening at the inlet of the valve casing (11) so that this opening is closed by the thermo-sensitive member (20). The unit (15) as a whole can be pulled out from the valve casing by pulling the thermo-sensitive chamber (20) outwardly. <MATH>

IPC 1-7
F25B 41/06

IPC 8 full level
F25B 39/02 (2006.01); **F25B 41/06** (2006.01); **G05D 23/12** (2006.01)

CPC (source: EP US)
F25B 41/335 (2021.01 - EP US); **F25B 2341/0683** (2013.01 - EP); **F25B 2500/01** (2013.01 - EP); **F25B 2500/21** (2013.01 - EP)

Cited by
EP1209426A1; EP1382920A3; EP0829690A1; EP0936424A3; EP1598581A1; EP1130345A1; CN100404925C; EP0871000A1; US6012301A; EP1416236A1; CN100422666C; EP0831283A1; US5924629A; EP0836061A1; US5957376A; US6189800B1; US6206294B1; US6896190B2; US7373788B2; US6434971B2; US6848624B2; US6484950B2; US6293472B1; US6450413B2; EP1382920A2; US6942160B2

Designated contracting state (EPC)
BE DE FR GB IT MC NL PT SE

DOCDB simple family (publication)
EP 0691517 A1 19960110; **EP 0691517 B1 19990901**; DE 69511793 D1 19991007; DE 69511793 T2 19991223; JP H0814707 A 19960119

DOCDB simple family (application)
EP 95110177 A 19950629; DE 69511793 T 19950629; JP 14757894 A 19940629