Title (en)
AN EXPANSION VALVE COMPRISING A DIAPHRAGM AND AT LEAST TWO OUTLET OPENINGS

Title (de)
EXPANSIONSVENTIL MIT EINER MEMBRAN UND MINDESTENS ZWEI AUSLASSÖFFNUNGEN

Title (fr)
SOUPAPE DE DÉTENTE COMPRENANT UN DIAPHRAGME ET AU MOINS DEUX OUVERTURES D ÉVACUATION

Publication
**EP 2359080 A2 20110824 (EN)**

Application
**EP 09756244 A 20091119**

Priority
• DK 2009000242 W 20091119
• DK PA200801630 A 20081120

Abstract (en)
[origin: WO2010057496A2] An expansion valve (1) comprising an inlet opening and at least two outlet openings (5) is disclosed. The inlet opening is adapted to receive fluid medium in a liquid state, and the outlet openings (5) are adapted to deliver fluid medium in an at least partly gaseous state. The expansion valve (1) further comprises a diaphragm (6), and at least two valve seats (4), each valve seat (4) being fluidly connected to one of the outlet openings (5). Each of the valve seats (4) forms a valve in combination with the diaphragm (6), the position of the diaphragm (6) thereby simultaneously defining an opening degree of each of the valves. A well defined distribution of fluid flow towards each of the outlet openings (5) is easily defined by movements of the diaphragm (6). The distribution takes place before or during expansion of the fluid medium. The expansion valve (1) may be arranged in an refrigerant path of a refrigeration system.

IPC 8 full level
**F25B 41/06** (2006.01); **F25B 5/02** (2006.01)

CPC (source: EP US)
**F25B 5/02** (2013.01 - EP US); **F25B 41/335** (2021.01 - EP US); **F25B 41/385** (2021.01 - EP US); F25B 2600/2511 (2013.01 - EP US); Y10T 137/7737 (2015.04 - EP US)

Citation (search report)
See references of WO 2010057496A2

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 SM TR

DOCDB simple family (publication)
**WO 2010057496 A2 20100527**; **WO 2010057496 A3 20100819**; BR PI0921071 A2 20151215; CN 102292609 A 20111221; EP 2359080 A2 20110824; JP 2012509455 A 20120419; JP 5543481 B2 20140709; MX 2011005254 A 20110531; RU 2011124352 A 20121227; RU 2481521 C2 20130510; US 2011308274 A1 20111222

DOCDB simple family (application)
**DK 2009000242 W 20091119**; BR PI0921071 A 20091119; CN 200980154922 A 20091119; EP 09756244 A 20091119; JP 2011536740 A 20091119; MX 2011005254 A 20091119; RU 2011124352 A 20091119; US 200913130060 A 20091119