

Title (en)
Expansion valve for an air conditioning system

Title (de)
Expansionsventil für ein Klimagerät

Title (fr)
Vanne d'expansion pour climatiseur

Publication
EP 1712853 A3 20090225 (DE)

Application
EP 06005276 A 20060315

Priority
DE 102005017623 A 20050415

Abstract (en)
[origin: EP1712853A2] The new unit is used in an air conditioning circuit operating with R774 refrigerant (alternatively R23, R116 or R123a). The expansion develops mechanical work, at least part of which is dissipated as losses. The drive unit (2) in which the flowing refrigerant (A, B) develops mechanical work, is constructed as a conventional piston engine, a rotary piston engine, an axial turbine and/or a radial turbine (2). Work losses are dissipated in the form of thermal energy. An adjustable braking unit (6) is included. An independent claim is included for the corresponding expansion method.

IPC 8 full level
F25B 41/06 (2006.01)

CPC (source: EP US)
F25B 9/06 (2013.01 - EP US); **F25B 41/31** (2021.01 - EP US); **F25B 2309/061** (2013.01 - EP); **F25B 2400/141** (2013.01 - EP)

Citation (search report)

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- [A] CH 430854 A 19670228 - BRITISH OXYGEN CO LTD [GB]
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Cited by
CN106837431A

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

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
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EP 06005276 A 20060315; DE 102005017623 A 20050415