

Title (en)  
Combined device comprising an internal heat exchanger and an accumulator participating to an AC loop, the combined device being equipped with a multi-functions internal component.

Title (de)  
Sammeler mit innerem Wärmetauscher und mit internen multifunktionskomponent

Title (fr)  
Dispositif combiné constitué d'un échangeur de chaleur interne et d'un accumulateur, et pourvu d'un composant interne multifonctions

Publication  
**EP 2199708 A1 20100623 (FR)**

Application  
**EP 09178157 A 20091207**

Priority  
FR 0807423 A 20081222

Abstract (en)  
The device (12) has a chamber (26) including an upper partition (27), a lower partition (28) and a peripheral wall (29). The chamber houses an internal heat exchanger (5), a separation area (19) and an accumulation area (20). The chamber houses a one-piece internal component (30) that comprises a definition wall (31) defining the separation area and the accumulation area. The internal component has a confining wall (32) confining the exchanger with respect to the accumulation area, and a conduit (33) that connects the confining wall and the definition wall. An independent claim is also included for an air-conditioning loop comprising a separation area constituted of an area of separation between a gaseous phase of the coolant and a liquid phase of the coolant.

Abstract (fr)  
L'invention a pour objet un dispositif combiné (12) comprenant une enceinte (26) constituée d'une cloison supérieure (27), d'une cloison inférieure (28) et d'au moins une paroi périphérique (29). Ladite enceinte (26) loge un échangeur de chaleur interne (5), une zone de séparation (19) et une zone d'accumulation (20). L'enceinte (26) loge aussi un composant interne monobloc (30) qui est constitué : - d'une paroi de délimitation (31) de la zone de séparation (19) et de la zone d'accumulation (20), - d'une paroi de confinement (32) de l'échangeur de chaleur interne (5) par rapport à la zone d'accumulation (20), - et d'un conduit (33) qui relie la paroi de confinement (32) et la paroi de délimitation (31).

IPC 8 full level  
**F25B 40/00** (2006.01)

CPC (source: EP US)  
**F25B 15/00** (2013.01 - US); **F25B 37/00** (2013.01 - US); **F25B 40/00** (2013.01 - EP US); **F25B 41/00** (2013.01 - US); **F25B 43/00** (2013.01 - US); **F25B 43/006** (2013.01 - EP US); **F25B 43/02** (2013.01 - US); **F28D 7/04** (2013.01 - EP US); **F25B 2400/02** (2013.01 - EP US); **F25B 2400/051** (2013.01 - EP US)

Citation (applicant)  
• JP H0285525 A 19900327 - FUJI TECHNICA INC  
• US 6463757 B1 20021015 - DICKSON TIMOTHY R [CA], et al

Citation (search report)  
• [X] JP 2004028525 A 20040129 - ZEXEL VALEO CLIMATE CONTR CORP  
• [X] US 6463757 B1 20021015 - DICKSON TIMOTHY R [CA], et al  
• [A] JP 2005299949 A 20051027 - ZEXEL VALEO CLIMATE CONTR CORP  
• [A] EP 1808654 A2 20070718 - SANDEN CORP [JP]  
• [A] FR 2913764 A1 20080919 - VALEO SYSTEMES THERMIQUES [FR]  
• [A] US 2006010905 A1 20060119 - GU JUNJIE [CA]

Cited by  
EP2963364A1

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

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 09178157 A 20091207**; AT 09178157 T 20091207; CN 200910260699 A 20091222; ES 09178157 T 20091207; FR 0807423 A 20081222; JP 2009288803 A 20091221; US 64432909 A 20091222