

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMEÜBERTRAGER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 2936030 A1 20151028 (DE)

Application
EP 13814488 A 20131212

Priority
• DE 102012224353 A 20121221
• EP 2013076449 W 20131212

Abstract (en)
[origin: WO2014095594A1] The invention relates to a heat exchanger (1, 10, 20, 30, 40) having a first flow duct for a refrigerant, wherein the refrigerant is or contains CO₂ in particular, and having a second flow duct for a liquid coolant, wherein at least one portion of the first flow duct is in thermal contact with a portion of the second flow duct, wherein the refrigerant and the coolant can flow in parallel to one another and/or against one another in their respective flow ducts, wherein the first flow duct is designed to withstand internal pressures of 100 bar and more, wherein the first flow duct is formed from a plurality of first flow paths (8, 15, 23, 33), which are in fluid communication with a first distribution section (6), wherein the second flow duct is formed from a plurality of second flow paths (9, 16, 25, 35), which are in fluid communication with a second distribution section (7), wherein the ratio of the hydraulic diameter of the second flow duct and the hydraulic diameter of the first flow duct is greater than 2:1, preferably greater than 5:1 and ideally between 5:1 and 10:1.

IPC 8 full level
F28D 9/00 (2006.01); **F28D 7/00** (2006.01); **F28D 7/16** (2006.01); **F28F 1/02** (2006.01)

CPC (source: EP)
F25B 39/04 (2013.01); **F28D 7/0025** (2013.01); **F28D 7/16** (2013.01); **F28D 9/0043** (2013.01); **F28F 1/022** (2013.01); **F25B 9/008** (2013.01); **F25B 2309/061** (2013.01); **F25B 2339/047** (2013.01); **F28D 2021/0073** (2013.01)

Citation (search report)
See references of WO 2014095594A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102012224353 A1 20140626; EP 2936030 A1 20151028; WO 2014095594 A1 20140626

DOCDB simple family (application)
DE 102012224353 A 20121221; EP 13814488 A 20131212; EP 2013076449 W 20131212