

Title (en)  
RADIATOR AND SUPERCRITICAL PRESSURE REFRIGERATION CYCLE USING THE SAME

Title (de)  
HEIZKÖRPER UND KÄLTEKREISLAUF MIT ÜBERKRITISCHEM DRUCK

Title (fr)  
RADIATEUR ET CYCLE FRIGORIFIQUE À PRESSION SUPERCRITIQUE L'UTILISANT

Publication  
**EP 3141857 A1 20170315 (EN)**

Application  
**EP 16183460 A 20160809**

Priority  
JP 2015159916 A 20150813

Abstract (en)  
An object is to provide a radiator capable of enhancing heat exchanging performance, and further reducing a refrigerant temperature at a refrigerant flow passage outlet, and a supercritical pressure refrigeration cycle using the same. A radiator 19 for radiating heat of a refrigerant whose pressure is supercritical pressure, including: multiple plate fins 31; and a plurality of refrigerant flow passages 34A to 34F formed by a heat transfer pipe group 33, wherein the refrigerant flow passages 34A to 34F include inlet heat transfer pipes 40A to 40C and outlet heat transfer pipes 42A1, 42A2, and intermediate heat transfer pipes 41A1 to 41C1, 41A2, 41B2, 41A3, 41B3, and a flow passage cross sectional area of the refrigerant flow passages 34A to 34F is gradually reduced from the inlet heat transfer pipes 40A to 40C to the outlet heat transfer pipes 42A1, 42A2.

IPC 8 full level  
**F28D 1/047** (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP)  
**F25B 9/008** (2013.01); **F25B 39/04** (2013.01); **F28D 1/0475** (2013.01); **F28D 1/05341** (2013.01); **F25B 2309/061** (2013.01); **F28D 2021/0073** (2013.01); **F28F 2210/02** (2013.01)

Citation (applicant)  
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• JP H07208822 A 19950811 - MITSUBISHI HEAVY IND LTD  
• JP H08121915 A 19960517 - MITSUBISHI HEAVY IND LTD

Citation (search report)  
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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)  
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