

Title (en)
HEAT PUMP SYSTEM

Title (de)
WÄRMEPUMPENSYSYSTEM

Title (fr)
SYSTÈME DE POMPE À CHALEUR

Publication
EP 3779325 A4 20210609 (EN)

Application
EP 19785252 A 20190405

Priority
• JP 2018077903 A 20180413
• JP 2019015135 W 20190405

Abstract (en)
[origin: EP3779325A1] A decrease in the heating capacity for a fluid to be heated in a radiator is prevented by thermal conduction via a joint portion between an economizer and the radiator in an integral heat exchanger. A heat pump system (1) includes a refrigerant circuit (10) constituted by connecting a compressor (11), a radiator (12), an expansion mechanism (13), an evaporator (14), and an economizer (22). In this case, the economizer (22) constitutes an integral heat exchanger (20) in which the economizer (22) and the radiator (12) are integrated with each other. Moreover, the integral heat exchanger (20) includes a heat insulating part (44) between the economizer (22) and the radiator (12).

IPC 8 full level
F25B 1/00 (2006.01); **F25B 1/10** (2006.01); **F25B 30/02** (2006.01); **F25B 39/00** (2006.01); **F25B 40/02** (2006.01)

CPC (source: EP)
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Citation (search report)
• [XY] EP 3088830 A1 20161102 - MITSUBISHI ELECTRIC CORP [JP]
• [Y] JP S62212055 A 19870918 - SHOWA ALUMINUM CORP
• [Y] JP 2015158315 A 20150903 - FUJITSU GENERAL LTD
• [A] JP 2008111624 A 20080515 - DAIKIN IND LTD
• [A] JP 2005201536 A 20050728 - MATSUSHITA ELECTRIC IND CO LTD
• See references of WO 2019198638A1

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

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EP 3779325 A1 20210217; **EP 3779325 A4 20210609**; **EP 3779325 B1 20230111**; CN 111954786 A 20201117; CN 111954786 B 20220923; JP 2019184193 A 20191024; JP 7092997 B2 20220629; WO 2019198638 A1 20191017

DOCDB simple family (application)
EP 19785252 A 20190405; CN 201980025207 A 20190405; JP 2018077903 A 20180413; JP 2019015135 W 20190405