

Title (en)
CONDENSER

Title (de)
KONDENSATOR

Title (fr)
CONDENSEUR

Publication
EP 2997318 A1 20160323 (DE)

Application
EP 14723838 A 20140515

Priority
• DE 102013209157 A 20130516
• EP 2014060024 W 20140515

Abstract (en)
[origin: WO2014184323A1] The invention relates to a condenser (1, 1a, 70, 80, 100) of stacked-plate design, having a first flow duct (25, 25a, 80, 87) for a refrigerant and having a second flow duct (28, 26a, 32, 42, 52, 85) for a coolant, wherein a multiplicity of disk elements is provided, said disk elements, stacked one on top of the other, forming mutually adjacent ducts between the disk elements, wherein a first number of the ducts is assigned to the first flow duct (25, 25a, 60, 87) and a second number of the ducts is assigned to the second flow duct (26, 26a, 32, 42, 52, 85), wherein the first flow duct (25, 25a, 60, 87) has a first region (3, 72, 81) for extraction of heat from and condensation of the vaporous refrigerant and has a second region (4, 71, 82) for supercooling of the condensed refrigerant, having an accumulator (2) for storing a refrigerant, wherein a refrigerant passage from the first region (3, 72, 81) to the second region (4, 71, 82) leads through the accumulator (2), wherein the accumulator (2) is in fluid communication with the first region (3, 72, 81) by way of a first connection element which forms a first fluid connection of the accumulator (2), wherein the accumulator (2) is in fluid communication with the second region (4, 71, 82) by way of a second connection element which forms a second fluid connection of the accumulator (2), and wherein the first connection element and/or the second connection element are/is formed by a pipe (5, 101, 125, 140, 150) which extends through a number of disk elements through openings in the disk elements.

IPC 8 full level
F25B 39/04 (2006.01); **F25B 40/02** (2006.01); **F28D 9/00** (2006.01)

CPC (source: EP US)
F25B 39/00 (2013.01 - US); **F25B 39/04** (2013.01 - EP US); **F25B 40/02** (2013.01 - EP US); **F28D 9/005** (2013.01 - EP US);
F25B 2339/044 (2013.01 - EP US); **F25B 2339/0444** (2013.01 - EP US); **F28D 2021/007** (2013.01 - EP US); **F28D 2021/0073** (2013.01 - EP US);
F28D 2021/0084 (2013.01 - EP US)

Citation (search report)
See references of WO 2014184323A1

Cited by
DE102020215226A1

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)
WO 2014184323 A1 20141120; BR 112015026951 A2 20170725; CN 105431691 A 20160323; CN 105431691 B 20180109;
DE 102013209157 A1 20141204; DE 112014002420 A5 20160128; EP 2997318 A1 20160323; EP 2997318 B1 20190206;
JP 2016519279 A 20160630; JP 6461104 B2 20190130; US 10088204 B2 20181002; US 2016091229 A1 20160331

DOCDB simple family (application)
EP 2014060024 W 20140515; BR 112015026951 A 20140515; CN 201480028406 A 20140515; DE 102013209157 A 20130516;
DE 112014002420 T 20140515; EP 14723838 A 20140515; JP 2016513372 A 20140515; US 201414890640 A 20140515