

Title (en)
COOLING SYSTEM

Title (de)
KÜHLSYSTEM

Title (fr)
SYSTÈME DE REFROIDISSEMENT

Publication
EP 3867578 A1 20210825 (EN)

Application
EP 19795481 A 20191021

Priority
• NO 20181346 A 20181021
• EP 2019078537 W 20191021

Abstract (en)
[origin: WO2020083823A1] The present invention provides a cooling system (1), comprising a receiver tank (2), an evaporator (3), a compressor (4) and a gas cooler (5), wherein the receiver tank (2) comprises a fluid inlet (6), a liquid outlet (7) and a gas outlet (8); the evaporator (3) comprises an evaporator inlet (9) and an evaporator outlet (10), the compressor (4) comprises a compressor inlet (11) and a compressor outlet (12); the gas cooler (5) comprises a cooler inlet (13) and a cooler outlet (14); and the liquid outlet (7) of the receiver tank (2) is connected to the evaporator inlet (9) via a first conduit (15), the evaporator outlet (10) is connected to the compressor inlet (11) via a second conduit (16), the compressor outlet (12) is connected to the cooler inlet (13) via a third conduit (17), and the cooler outlet (14) is connected to the fluid inlet (6) of the receiver via a fourth conduit (18), wherein at least one of the first conduit (15) and the fourth conduit (18) comprises a pressure regulator (19,25), and the gas outlet (8) of the receiver tank is connected to the evaporator inlet (9) via a fifth conduit (20) and a gas flow regulator (21,22), such that a flow of liquid refrigerant in the first conduit (15) may be controlled by operating the gas flow regulator (21,22) during use.

IPC 8 full level
F25B 41/00 (2021.01); **F25B 9/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP NO US)
F25B 9/008 (2013.01 - NO US); **F25B 41/00** (2013.01 - NO); **F25B 41/20** (2021.01 - EP NO US); **F25B 41/39** (2021.01 - EP US); **F25B 41/40** (2021.01 - EP NO US); **F25B 49/02** (2013.01 - EP NO US); **F25B 9/006** (2013.01 - EP); **F25B 2309/061** (2013.01 - EP US); **F25B 2400/23** (2013.01 - EP US); **F25B 2600/2515** (2013.01 - EP US); **F25B 2700/195** (2013.01 - EP US); **F25B 2700/197** (2013.01 - EP US); **F25B 2700/21163** (2013.01 - EP US); **F25B 2700/21175** (2013.01 - EP US)

Citation (search report)
See references of WO 2020083823A1

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 2020083823 A1 20200430; CN 113227678 A 20210806; CN 113227678 B 20230602; EP 3867578 A1 20210825; EP 3867578 B1 20231122; EP 3867578 C0 20231122; JP 2022504987 A 20220113; JP 7496817 B2 20240607; NO 20191249 A1 20200422; NO 345588 B1 20210426; US 2021372678 A1 20211202

DOCDB simple family (application)
EP 2019078537 W 20191021; CN 201980069677 A 20191021; EP 19795481 A 20191021; JP 2021520919 A 20191021; NO 20191249 A 20191021; US 201917285102 A 20191021