

Title (en)
HEAT PUMP SYSTEM AND AIR CONDITIONER

Title (de)
WÄRMEPUMPENSYSYSTEM UND KLIMAAANLAGE

Title (fr)
SYSTÈME DE POMPE À CHALEUR ET CLIMATISEUR

Publication
EP 3680578 A4 20200805 (EN)

Application
EP 19801655 A 20190530

Priority
• CN 201811253993 A 20181024
• CN 2019089266 W 20190530

Abstract (en)
[origin: EP3680578A1] A heat pump system (100) and an air conditioner are provided. The heat pump system (100) includes a compressor assembly (10), an outdoor heat exchanger (20), an indoor heat exchanger (30), a heating and heat accumulation device (50) and a switching device (40). The heating and heat accumulation device (50) is connected in series with the switching device (40). In the first heating mode, a refrigerant discharged out of the compressor assembly (10) enters the indoor heat exchanger (30) and the outdoor heat exchanger (20) in sequence after passing through the switching device (40) and the heating and heat accumulation device (50). In the defrosting mode, the refrigerant discharged out of the compressor assembly (10) enters the indoor heat exchanger (30), the outdoor heat exchanger (20) and the heating and heat accumulation device (50) in sequence after passing through the switching device (40).

IPC 8 full level
F25B 13/00 (2006.01); **F25B 41/20** (2021.01); **F25B 47/02** (2006.01)

CPC (source: CN EP US)
F25B 13/00 (2013.01 - CN EP US); **F25B 29/003** (2013.01 - CN); **F25B 41/20** (2021.01 - CN EP US); **F25B 47/02** (2013.01 - EP); **F25B 47/025** (2013.01 - CN US); **F25B 2313/008** (2013.01 - CN EP US); **F25B 2313/02742** (2013.01 - CN EP US); **F25B 2347/023** (2013.01 - CN); **F25B 2400/19** (2013.01 - CN US); **F25B 2500/26** (2013.01 - EP US)

Citation (search report)
• [XA] CN 105865073 A 20160817 - GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO LTD, et al
• [A] US 4727726 A 19880301 - MITANI AKIO [JP], et al
• [A] KR 101436637 B1 20140901
• See references of WO 2020082735A1

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)
EP 3680578 A1 20200715; **EP 3680578 A4 20200805**; **EP 3680578 B1 20221228**; CN 109405335 A 20190301; CN 109405335 B 20200522; US 2021364206 A1 20211125; WO 2020082735 A1 20200430

DOCDB simple family (application)
EP 19801655 A 20190530; CN 201811253993 A 20181024; CN 2019089266 W 20190530; US 201916618158 A 20190530