

Title (en)
REFRIGERANT PURGE SYSTEM WITH MEMBRANE PROTECTION

Title (de)
KÄLTEMITTELREINIGUNGSSYSTEM MIT MEMBRANSCHUTZ

Title (fr)
SYSTÈME DE PURGE DE RÉFRIGÉRANT AVEC PROTECTION DE MEMBRANE

Publication
EP 3483527 A1 20190515 (EN)

Application
EP 18205217 A 20181108

Priority
US 201762584073 P 20171109

Abstract (en)
Disclosed is a refrigeration system including a heat transfer fluid circulation loop configured to allow a refrigerant to circulate through the circulation loop. A purge gas outlet is in operable communication with the heat transfer fluid circulation loop. The system also includes at least one gas permeable membrane having a first side in operable communication with the purge gas outlet and a second side. The membrane includes a separation layer including a porous inorganic material with pores of a size to allow passage of contaminants through the membrane and restrict passage of the through the membrane, and a polymer coating over the separation layer. A permeate outlet is in operable communication with the second side of the membrane.

IPC 8 full level
F25B 43/00 (2006.01); **F25B 43/04** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F25B 43/00 (2013.01); **F25B 43/043** (2013.01); **F25B 49/02** (2013.01)

Citation (applicant)
US 201862584012 P

Citation (search report)
• [XAI] US 5044166 A 19910903 - WIJMANS JOHANNES G [US], et al
• [XAI] US 5062273 A 19911105 - LEE KUNG H [US], et al
• [A] US 4417451 A 19831129 - SPAUSCHUS HANS O [US]
• [A] WO 2015020719 A1 20150212 - CARRIER CORP [US]
• [A] US 2007113581 A1 20070524 - YOSHIMI MANABU [JP], et al

Cited by
EP3932513A1; WO2021133151A1; US11774148B2; WO2020247247A1

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 3483527 A1 20190515; CN 109764585 A 20190517

DOCDB simple family (application)
EP 18205217 A 20181108; CN 201811323690 A 20181108