

Title (en)
IMPROVED DIRECT EXPANSION EVAPORATOR BASED CHILLER SYSTEM

Title (de)
VERBESSERTER KÜHLERSYSTEM AUF DER BASIS EINES DIREKTEXPANSIONSVERDAMPFERS

Title (fr)
SYSTÈME DE REFROIDISSEMENT À ÉVAPORATEUR À DÉTENTE DIRECTE AMÉLIORÉ

Publication
EP 3183514 A1 20170628 (EN)

Application
EP 14809083 A 20140821

Priority
IB 2014001842 W 20140821

Abstract (en)
[origin: WO2016027116A1] A chiller system is provided including a vapor compression circuit consisting of a fluidly coupled compressor, condenser, expansion valve, and evaporator. A refrigerant circulates through the vapor compression circuit. The evaporator is a direct exchange heat exchanger. Refrigerant provided at an outlet of the evaporator is a two-phase mixture including liquid refrigerant and vapor refrigerant. The vapor refrigerant comprises less than or equal to 85% of the two-phase mixture. A refrigerant to refrigerant heat exchanger is fluidly coupled to the circuit. The refrigerant to refrigerant heat exchanger is configured to convert the vapor refrigerant provided at the outlet of the evaporator into a superheated vapor.

IPC 8 full level
F25B 1/00 (2006.01); **F25B 40/00** (2006.01); **F25B 40/02** (2006.01); **F25B 40/06** (2006.01)

CPC (source: EP US)
F25B 1/00 (2013.01 - EP US); **F25B 40/00** (2013.01 - EP US); **F25B 40/06** (2013.01 - US); **F25B 41/00** (2013.01 - US);
F25B 43/02 (2013.01 - US); **F25B 2341/0012** (2013.01 - EP US); **F25B 2400/23** (2013.01 - EP US)

Citation (search report)
See references of WO 2016027116A1

Cited by
US11306950B2

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)
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DOCDB simple family (publication)
WO 2016027116 A1 20160225; CN 106662365 A 20170510; CN 106662365 B 20210427; EP 3183514 A1 20170628; EP 3183514 B1 20210630;
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