

Title (en)
ENHANCED ECONOMIZER OPERATION IN A CHILLER

Title (de)
VERBESSERTER ECONOMIZER-BETRIEB IN EINEM KÜHLER

Title (fr)
FONCTIONNEMENT AMÉLIORÉ D'UN ÉCONOMISEUR DANS UN REFROIDISSEUR

Publication
EP 4137755 A1 20230222 (EN)

Application
EP 22190720 A 20220817

Priority
US 202163235715 P 20210821

Abstract (en)
A refrigeration system 20 includes a compressor 22, a heat rejecting heat exchanger 24, an expansion device 28, and a heat absorbing heat exchanger 30 fluidly connected to form a closed loop through which a refrigerant is configured to circulate. An economizer heat exchanger 30 is located downstream from an outlet of the heat rejecting heat exchanger 24 and upstream from the expansion device 28 relative to a flow of the refrigerant. The economizer heat exchanger 30 has a main flow path 36 and an economizer flow path 38 formed therein. All liquid refrigerant provided at an outlet of the heat rejecting heat exchanger 24 is provided to the main flow path 36.

IPC 8 full level
F25B 40/02 (2006.01); **F25B 31/00** (2006.01)

CPC (source: EP US)
F25B 31/006 (2013.01 - EP); **F25B 40/02** (2013.01 - EP US); **F25B 2400/0409** (2013.01 - US); **F25B 2400/13** (2013.01 - EP US)

Citation (search report)

- [X] WO 2007111586 A1 20071004 - CARRIER CORP [US], et al
- [XI] US 2009113900 A1 20090507 - LIFSON ALEXANDER [US], et al

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4137755 A1 20230222; CN 115711497 A 20230224; US 2023053834 A1 20230223

DOCDB simple family (application)
EP 22190720 A 20220817; CN 202210998015 A 20220819; US 202217889461 A 20220817