

Title (en)
IMPROVED OPERATION OF A REFRIGERANT SYSTEM

Title (de)
VERBESSERTER BETRIEB EINES KÜHLSYSTEMS

Title (fr)
FONCTIONNEMENT AMÉLIORÉ D'UN SYSTÈME DE RÉFRIGÉRATION

Publication
EP 2321593 A4 20140528 (EN)

Application
EP 09805559 A 20090806

Priority
• US 2009052995 W 20090806
• US 8700808 P 20080807

Abstract (en)
[origin: WO2010017384A2] A method and system for operating a refrigerant system having a reciprocating compressor with a main cylinder module and an economizer cylinder module includes regulating a flow of refrigerant into the main cylinder module and regulating a flow of refrigerant into the economizer cylinder module. The main cylinder module and the economizer cylinder module have separate inlet and outlet discharge streams. The flow through each module is regulated as a function of an operating mode of the refrigerant system, which includes various modes of loading and unloading based, in part, on a cooling demand. In some embodiments, the refrigerant system may include a connector refrigerant line configured to redirect refrigerant from the economizer cylinder module to the main cylinder module or from the main cylinder module to the economizer cylinder module.

IPC 8 full level
F25B 41/00 (2006.01); **F04B 39/00** (2006.01); **F25B 1/10** (2006.01); **F25B 41/04** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP US)
F04B 39/00 (2013.01 - EP US); **F25B 1/10** (2013.01 - EP US); **F25B 41/22** (2021.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2600/2509** (2013.01 - EP US); **F25B 2700/1931** (2013.01 - EP US); **F25B 2700/2106** (2013.01 - EP US)

Citation (search report)
• [XY] US 2006288719 A1 20061228 - SHAPIRO DORON [US], et al
• [Y] US 6047556 A 20000411 - LIFSON ALEXANDER [US]
• See references of WO 2010017384A2

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2010017384 A2 20100211; **WO 2010017384 A3 20100514**; EP 2321593 A2 20110518; EP 2321593 A4 20140528;
EP 2321593 B1 20190619; US 2011138827 A1 20110616

DOCDB simple family (application)
US 2009052995 W 20090806; EP 09805559 A 20090806; US 200913057959 A 20090806