

Title (en)
Variable capacity refrigeration system

Title (de)
Kühlsystem mit veränderlicher leistung

Title (fr)
Système de réfrigération à puissance variable

Publication
EP 2357431 A1 20110817 (EN)

Application
EP 10382016 A 20100201

Priority
EP 10382016 A 20100201

Abstract (en)
Refrigeration system with variable capacity (fig. 1), said system involving at least: one or more compressors, a condenser, and means to manage the refrigerant flow. Those means consisting of: a restriction control valve in the refrigerant return line from evaporators, a hot gas by-pass valve between the compressor discharge and the compressor suction line, and a thermostatic liquid injection valve into the compressor suction line.

IPC 8 full level
F25B 41/04 (2006.01)

CPC (source: EP US)
F25B 41/22 (2021.01 - EP US); **F25B 2400/13** (2013.01 - EP); **F25B 2600/0251** (2013.01 - EP); **F25B 2600/0261** (2013.01 - EP); **F25B 2600/2509** (2013.01 - EP); **F25B 2700/1933** (2013.01 - EP); **F25B 2700/2117** (2013.01 - EP)

Citation (applicant)
• US 2002021972 A1 20020221 - VAISMAN IGOR [CA]
• EP 0981033 A2 20000223 - CARRIER CORP [US]
• WANG ET AL.: "Mechanical Engineering Handbook", 1999, article "Air conditioning and refrigeration", pages: 9.77
• WANG: "Handbook of Air conditioning and Refrigeration", 2000, MCGRAW-HILL, pages: 11.24 - 26

Citation (search report)
• [X] WO 2009056561 A1 20090507 - OLIVA TORRAS S A L [ES], et al
• [X] WO 2005088212 A1 20050922 - ARCELIK AS [TR], et al
• [X] WO 2008079122 A1 20080703 - CARRIER CORP [US], et al

Cited by
CN108603695A; EP2873936A3; WO2017102122A1; WO2017123602A1

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

Designated extension state (EPC)
AL BA RS

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