

Title (en)

METHOD FOR OPERATING A ROTATIONAL-SPEED-VARIABLE REFRIGERANT COMPRESSOR

Title (de)

VERFAHREN ZUM BETRIEB EINES DREHZAHLVARIABLEN KÄLTEMITTELVERDICHTERS

Title (fr)

PROCÉDÉ POUR FAIRE FONCTIONNER UN COMPRESSEUR FRIGORIFIQUE À VITESSE VARIABLE

Publication

EP 3548812 A1 20191009 (DE)

Application

EP 17808456 A 20171201

Priority

- AT 502552016 U 20161201
- EP 2017081206 W 20171201

Abstract (en)

[origin: US2019310004A1] The invention relates to a method for operating a rotational-speed-variable refrigerant compressor (2) for cooling a cooling volume (4) of a refrigeration system (1), which refrigeration system does not have its own control unit, wherein the refrigeration system (1) comprises at least one thermostat (3) for directly or indirectly monitoring a temperature state of the cooling volume (4) and wherein the rotational-speed behavior of the refrigerant compressor (2) during a cooling cycle is controlled by means of a specification rotational-speed control stored in an electronic control device (6) of the refrigerant compressor (2). According to the invention, in order to enable adjustment of the rotational-speed behavior in reaction to a preceding special operating state and to enable energy-optimized cooling of the cooling volume (4) that is as fast as possible, at least one comparison parameter is stored in the electronic control device (6) of the refrigerant compressor (2) and exceedance or undershooting of the comparison parameter by a current measured parameter value is monitored, a special cooling cycle different from the specification rotational-speed control is triggered if the current measured parameter value exceeds or undershoots the comparison parameter, possibly, a current cooling cycle controlled by means of the specification rotational-speed control is interrupted by the special cooling cycle.

IPC 8 full level

F25B 49/02 (2006.01); **F25B 47/02** (2006.01)

CPC (source: EP US)

F24F 11/37 (2017.12 - US); **F24F 11/64** (2017.12 - US); **F24F 11/65** (2017.12 - US); **F25B 47/02** (2013.01 - US); **F25B 49/022** (2013.01 - EP US);
F25B 47/02 (2013.01 - EP); **F25B 2600/0253** (2013.01 - EP US); **F25B 2700/151** (2013.01 - EP US); **F25B 2700/2106** (2013.01 - EP US);
F25B 2700/21153 (2013.01 - EP US); **Y02B 30/70** (2013.01 - EP)

Citation (search report)

See references of WO 2018100166A1

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)

US 2019310004 A1 20191010; CN 110234942 A 20190913; EP 3548812 A1 20191009

DOCDB simple family (application)

US 201716465936 A 20171201; CN 201780074744 A 20171201; EP 17808456 A 20171201