

Title (en)

AN APPARATUS FOR DAMPENING VIBRATIONS IN A REFRIGERATION SYSTEM

Title (de)

VORRICHTUNG ZUR DÄMPFUNG VON SCHWINGUNGEN IN EINEM KÜHLSYSTEM

Title (fr)

APPAREIL POUR AMORTIR LES VIBRATIONS DANS UN SYSTÈME DE RÉFRIGÉRATION

Publication

**EP 3929508 A1 20211229 (EN)**

Application

**EP 21169588 A 20210421**

Priority

IT 202000010126 A 20200506

Abstract (en)

An apparatus for dampening vibrations in a refrigeration system (100) comprises: a check valve (3) operatively connectable between an economizer inlet (13) of a compressor (1) and the economizer branch (2), the check valve (3) including a housing (302) and a shutter (301) movable within the housing (302); a first bypass branch (31), having a first end (31A) connectable to the refrigeration circuit to receive a first flow of the refrigerant fluid, and a second end (31B) connected to the check valve (3) on a first side of the shutter (301A), a second bypass branch (32), having a first end (32A) connectable to the refrigeration circuit to receive a second flow of the refrigerant fluid, and a second end (32B) connected to the economizer branch (2), wherein the shutter (301) is movable by effect of a pressure difference between the first side (301A) of the shutter (301), and the second side (301B) of the shutter (301).

IPC 8 full level

**F25B 49/02** (2006.01); **F16K 15/00** (2006.01); **F04B 49/24** (2006.01); **F25B 1/10** (2006.01); **F25B 13/00** (2006.01)

CPC (source: EP)

**F04B 39/0055** (2013.01); **F04B 49/035** (2013.01); **F04B 49/24** (2013.01); **F25B 49/02** (2013.01); **F25B 1/10** (2013.01); **F25B 13/00** (2013.01); **F25B 2400/04** (2013.01); **F25B 2400/13** (2013.01); **F25B 2500/13** (2013.01); **F25B 2600/0261** (2013.01); **F25B 2600/2507** (2013.01); **F25B 2600/2509** (2013.01)

Citation (applicant)

WO 2020084545 A1 20200430 - TURBOALGOR S R L [IT]

Citation (search report)

- [A] WO 2020084545 A1 20200430 - TURBOALGOR S R L [IT]
- [A] WO 2006118573 A1 20061109 - CARRIER CORP [US], et al
- [A] WO 2015029421 A1 20150305 - DENSO CORP [JP]

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)

**EP 3929508 A1 20211229**; **EP 3929508 B1 20230419**; EP 4202324 A1 20230628; EP 4202324 B1 20240605; ES 2944473 T3 20230621

DOCDB simple family (application)

**EP 21169588 A 20210421**; EP 23156551 A 20210421; ES 21169588 T 20210421