Title (en)

AIR-CONDITIONING COMPRESSOR FOR A MOTOR VEHICLE

Title (de)

KLIMAKOMPRESSOR FÜR EIN KRAFTFAHRZEUG

Title (fr)

COMPRESSEUR DE CLIMATISATION CONÇU POUR UN VÉHICULE AUTOMOBILE

Publication

EP 2771573 A1 20140903 (DE)

Application

EP 12784452 A 20121025

Priority

- DE 102011117354 A 20111029
- EP 2012004456 W 20121025

Abstract (en)

[origin: WO2013060456A1] The invention relates to an air-conditioning compressor for a motor vehicle, the pressure chamber (18) of which is connected to a high-pressure-side port (26) and the suction chamber (16) of which is connected to a low-pressure-side port (24). A check valve (28) is arranged between the pressure chamber (18) and the high-pressure-side port (26). The valve body (32) of the check valve is preloaded by a preload force oppositely to the intended refrigerant flow direction and in the closing direction of the check valve (28). The preload force has a first spring preload force component that is created by a spring (34) that is supported on the valve body (32) at one end and on a spring abutment at the other end. The invention is characterized in that the check valve (28) is equipped with a preload increasing device, which applies an additional preload force component to the valve body (32) if a pressure present at the high-pressure-side port (26) is less than a pressure present at the low-side-pressure port (24).

IPC 8 full level

F04B 27/10 (2006.01); **F04B 27/18** (2006.01); **F04B 49/03** (2006.01); **F04B 49/22** (2006.01)

CPC (source: EP)

F04B 27/1804 (2013.01); F04B 2027/1813 (2013.01); F04B 2027/1827 (2013.01); F04B 2027/1854 (2013.01)

Citation (search report)

See references of WO 2013060456A1

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

DOCDB simple family (publication)

DE 102011117354 A1 20130502; CN 104105876 A 20141015; CN 104105876 B 20161005; EP 2771573 A1 20140903; EP 2771573 B1 20151007; WO 2013060456 A1 20130502; WO 2013060456 A8 20140501

DOCDB simple family (application)

DE 102011117354 A 20111029; CN 201280053448 A 20121025; EP 12784452 A 20121025; EP 2012004456 W 20121025