

Title (en)

SCREW COMPRESSOR AND REFRIGERATION CYCLE DEVICE

Title (de)

SCHRAUBENVERDICHTER UND KÜHLZYKLUSVORRICHTUNG

Title (fr)

COMPRESSEUR À VIS ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication

EP 3425202 B1 20240619 (EN)

Application

EP 16892504 A 20160301

Priority

JP 2016056265 W 20160301

Abstract (en)

[origin: EP3425202A1] A screw compressor according to an embodiment of the present invention includes an electric motor an rotation speed of which can be changed, a screw rotor including a plurality of screw grooves on an outer circumferential surface, a screw shaft to transmit a driving force of the electric motor to the screw rotor and rotate the screw rotor, a first gate rotor and a second gate rotor respectively disposed on both sides of the screw rotor point-symmetrically with respect to the screw shaft and including, in outer circumferential portions, a plurality of teeth meshed with the screw grooves, a casing having a cylindrical shape to house the screw rotor inside a cylinder, a bypass device to cause a first compression chamber, which is a space surrounded by the first gate rotor, the screw groove, and the casing, and a low-pressure chamber having a suction pressure atmosphere to communicate, and an economizer port provided in the casing to cause fluid flowing from an outside to flow into the first compression chamber.

IPC 8 full level

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CPC (source: EP)

F04C 18/52 (2013.01); **F04C 29/0014** (2013.01); **F25B 1/047** (2013.01); **F04C 28/08** (2013.01); **F04C 28/12** (2013.01)

Cited by

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