

Title (en)

CRANKSHAFT FOR ROTARY COMPRESSOR, ROTARY COMPRESSOR AND REFRIGERATING CYCLE DEVICE

Title (de)

KURBELWELLE FÜR ROTATIONSVERDICHTER, ROTATIONSVERDICHTER UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)

VILEBREQUIN POUR COMPRESSEUR ROTATIF, COMPRESSEUR ROTATIF ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication

EP 3211239 A4 20180808 (EN)

Application

EP 15891468 A 20150508

Priority

CN 2015078608 W 20150508

Abstract (en)

[origin: EP3211239A1] A crankshaft for a rotary compressor includes: a body (1) and an eccentric portion (2), the eccentric portion (2) being fitted over the body (1), wherein at least one of a flexible structure (21) and an oil pressure surface (22) is arranged on the eccentric portion (2). The flexible structure (21) is configured to deform inwards when subject to an external force in an inward direction. The oil pressure surface (22) is configured in such a way that in a direction opposite to a rotating direction of a rotating central axis of a crankshaft (300), a distance between a front end (221) of the oil pressure surface (22) and the central axis of the eccentric portion (2) is smaller than a distance between a tail end (222) of the oil pressure surface (22) and the central axis of the eccentric portion (2). Also disclosed are a rotary compressor and a refrigerating cycle device. The crankshaft can effectively solve the problem that a rotary compressor gets stuck due to abnormal contact between a piston and an air cylinder, and a high-pressure oil wedge can be formed at a tail portion of an oil cavity, thereby increasing an inlet oil pressure, and improving the environment of lubrication between an eccentric portion and a piston.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 5328342 A 19940712 - ISHII MINORU [JP], et al
- [A] US 2006222543 A1 20061005 - PARK JAE W [KR], et al
- See references of WO 2016179765A1

Cited by

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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

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BA ME

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