

Title (en)
ROTARY COMPRESSOR AND REFRIGERATION CYCLE DEVICE

Title (de)
DREHKOMPRESSOR UND KÜHLKREISVORRICHTUNG

Title (fr)
COMPRESSEUR ROTATIF ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication
EP 3896285 A4 20220803 (EN)

Application
EP 18942836 A 20181212

Priority
JP 2018045713 W 20181212

Abstract (en)
[origin: EP3896285A1] In a rotary compressor of the embodiment, a thickness of a partition plate in an axial direction is smaller than a thickness of a first flange part in the axial direction and a thickness of a second flange part in the axial direction. An area of a portion in which an end surface of a first roller on a partition plate side can be exposed to a shaft hole is Sc1. An area of a portion in which an end surface of the first roller on the first flange part side can be exposed to an inner region of an outer circumference of a first groove part is Se1. At this time, $1 < Sc1/Se1 \leq 1.6$ is established. An area of a portion in which an end surface of a second roller on the partition plate side can be exposed to the shaft hole is Sc2. An area of a portion in which an end surface of the second roller on the second flange part side can be exposed to an inner region of an outer circumference of a second groove part is Se2. At this time, $1 < Sc2/Se2 \leq 1.6$ is established. A solid lubricating film is formed on a first surface of the first flange part and a second surface of the second flange part.

IPC 8 full level
F04C 23/00 (2006.01); **F04C 18/356** (2006.01); **F04C 29/00** (2006.01)

CPC (source: EP)
F04C 18/3564 (2013.01); **F04C 23/001** (2013.01); **F04C 29/02** (2013.01); **F04C 2210/261** (2013.01); **F04C 2240/10** (2013.01); **F05C 2251/14** (2013.01)

Citation (search report)

- [I] EP 2770212 A1 20140827 - PANASONIC CORP [JP]
- [I] US 2018238596 A1 20180823 - GOTOU SHINYA [JP]
- [A] US 2017248139 A1 20170831 - FURUYA SHIHO [JP], et al
- See references of WO 2020121443A1

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)
EP 3896285 A1 20211020; **EP 3896285 A4 20220803**; CN 113167276 A 20210723; CN 113167276 B 20230414; JP 7186242 B2 20221208; JP WO2020121443 A1 20210930; WO 2020121443 A1 20200618

DOCDB simple family (application)
EP 18942836 A 20181212; CN 201880099766 A 20181212; JP 2018045713 W 20181212; JP 2020559610 A 20181212