

Title (en)  
REFRIGERANT COMPRESSOR AND REFRIGERATION DEVICE WITH SAME

Title (de)  
KÄLTEMITTELVERDICHTER UND KÜHLVORRICHTUNG DAMIT

Title (fr)  
COMPRESSEUR RÉFRIGÉRANT ET DISPOSITIF DE RÉFRIGÉRATION COMPRENANT CE DERNIER

Publication  
**EP 3543529 A4 20191030 (EN)**

Application  
**EP 17870945 A 20171116**

Priority  
• JP 2016224663 A 20161118  
• JP 2017041307 W 20171116

Abstract (en)  
[origin: EP3543529A1] A refrigerant compressor includes: an electric component (106); a compression component (107) driven by the electric component to compress a refrigerant; and a sealed container (101) accommodating the electric component and the compression component. The compression component includes: a shaft part (109, 110) rotated by the electric component; and a bearing part (114, 119) slidingly contacting the shaft part such that the shaft part is rotatable. A film (160) having hardness equal to or more than hardness of a sliding surface of the bearing part is provided on a sliding surface of the shaft part. Surface roughness of the sliding surface of the bearing part is smaller than surface roughness of the sliding surface of the shaft part.

IPC 8 full level  
**F04B 39/00** (2006.01)

CPC (source: EP US)  
**F04B 39/0094** (2013.01 - EP US); **F04B 39/0246** (2013.01 - US); **F04B 39/0292** (2013.01 - US); **F04B 2201/1207** (2013.01 - US); **F04B 2201/1209** (2013.01 - US); **F05C 2201/0436** (2013.01 - US); **F25B 31/004** (2013.01 - US)

Citation (search report)  
• [A] JP 2014196680 A 20141016 - HITACHI LTD  
• [A] JP 2002147377 A 20020522 - MATSUSHITA ELECTRIC IND CO LTD  
• [A] DE 102006020102 A1 20071031 - LEYBOLD VAKUUM GMBH [DE]  
• See references of WO 2018092849A1

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)  
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DOCDB simple family (application)  
**EP 17870945 A 20171116**; CN 201780071402 A 20171116; JP 2017041307 W 20171116; JP 2018551684 A 20171116; US 201716346755 A 20171116