

Title (en)  
HERMETIC TWO-STAGE COMPRESSOR

Title (de)  
HERMETISCHER ZWEISTUFIGER VERDICHTER

Title (fr)  
COMPRESSEUR HERMÉTIQUE À DEUX ÉTAGES

Publication  
**EP 3409948 A4 20190306 (EN)**

Application  
**EP 17782527 A 20170414**

Priority  
• JP 2016081000 A 20160414  
• JP 2017015333 W 20170414

Abstract (en)  
[origin: EP3409948A1] A hermetic two-stage compressor is equipped with a scroll compressor (13) that further compresses a refrigerant (R) discharged from a rotary compressor (12), and is arranged above an upper bearing (31) having a bearing (31a) supporting a rotary shaft (15) in the upper part inside a housing (11) in the interior of which is an oil storage (01), and a bearing casing (31b) supporting the bearing (31a) in the housing (11). The bearing casing (31b) is provided with: inflow channels (FC), which are equipped with intake openings (FCa) that are provided so as to draw the refrigerant (R) into the scroll compressor (13), and that open downward; and a restricting surface (62), which is arranged between the intake openings (FCa) and an electric motor (14), and is provided from the inner surface of the housing (11) toward the inside in the radial direction, so as to restrict the flow of the refrigerant (R) to the intake openings (FCa) on the outside in the radial direction.

IPC 8 full level  
**F04C 29/00** (2006.01); **F04C 18/02** (2006.01); **F04C 23/00** (2006.01); **F04C 29/02** (2006.01); **F04C 29/12** (2006.01); **F04C 18/356** (2006.01)

CPC (source: EP KR)  
**F04C 18/02** (2013.01 - KR); **F04C 23/005** (2013.01 - EP); **F04C 23/008** (2013.01 - EP KR); **F04C 29/02** (2013.01 - KR); **F04C 29/026** (2013.01 - EP); **F04C 29/12** (2013.01 - EP); **F04C 18/0215** (2013.01 - EP); **F04C 18/356** (2013.01 - EP); **F04C 2270/20** (2013.01 - EP)

Citation (search report)  
• [I] EP 2177768 A1 20100421 - MITSUBISHI HEAVY IND LTD [JP]  
• [I] EP 1371852 A2 20031217 - TECUMSEH PRODUCTS CO [US]  
• [A] EP 2735742 A1 20140528 - MITSUBISHI HEAVY IND LTD [JP]  
• See references of WO 2017179714A1

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)  
**EP 3409948 A1 20181205**; **EP 3409948 A4 20190306**; **EP 3409948 B1 20200513**; AU 2017251203 A1 20180830; AU 2017251203 B2 20190620; CN 108700076 A 20181023; CN 108700076 B 20200714; JP 2017190732 A 20171019; JP 6755114 B2 20200916; KR 102061440 B1 20191231; KR 20180107215 A 20181001; WO 2017179714 A1 20171019

DOCDB simple family (application)  
**EP 17782527 A 20170414**; AU 2017251203 A 20170414; CN 201780010683 A 20170414; JP 2016081000 A 20160414; JP 2017015333 W 20170414; KR 20187025155 A 20170414