

Title (en)
HERMETIC COMPRESSOR

Title (de)
HERMETISCHER VERDICHTER

Title (fr)
COMPRESSEUR HERMÉTIQUE

Publication
EP 3037665 A4 20161228 (EN)

Application
EP 14864603 A 20140613

Priority
• JP 2013238611 A 20131119
• JP 2014003163 W 20140613

Abstract (en)
[origin: EP3037665A1] The present invention prevents damage to a housing in a caulked portion, even if an excessive thrust load occurs in a compression mechanism. A scroll compressor (1) which comprises: the housing (3); the compression mechanism which is accommodated inside the housing (3) ; and a bearing housing (19) which comprises a support section (19d) that receives a thrust load (Fs) occurring due to the action of the compression mechanism, and further comprises a bearing section (19b) that rotatably supports a main shaft (9) which transmits the driving force of a drive source to the compression mechanism. The bearing housing (19) is fixed to the housing (3) by a caulked section (30) at which a plastically deformed portion of the housing (3) is press-fitted into a recess (19a) provided in the bearing housing (19). A deformation-releasing groove (19f) is provided to a surface of the bearing housing (19), said surface opposing the compression mechanism and corresponding to the caulked section (30).

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

CPC (source: EP)
F01C 21/10 (2013.01); **F04C 18/0215** (2013.01); **F04C 23/008** (2013.01); **F04C 2230/60** (2013.01)

Citation (search report)
• [X] US 2013287617 A1 20131031 - SIEFRING CHRISTOPHER NICHOLAS [US]
• [X] US 2013177465 A1 20130711 - CLENDENIN HARRY B [US], et al
• [X] US 7717687 B2 20100518 - REINHART KEITH J [US]
• [X] US 2006127260 A1 20060615 - UM KWANG-NO [KR]
• [A] US 2006127263 A1 20060615 - HWANG SEON-WOONG [KR], et al
• See references of WO 2015075851A1

Cited by
EP3311933A1

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 3037665 A1 20160629; EP 3037665 A4 20161228; JP 2015098812 A 20150528; JP 6199708 B2 20170920; WO 2015075851 A1 20150528

DOCDB simple family (application)
EP 14864603 A 20140613; JP 2013238611 A 20131119; JP 2014003163 W 20140613