

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À VOLUTE

Publication
EP 3388673 A1 20181017 (EN)

Application
EP 17752966 A 20170201

Priority
• JP 2016030061 A 20160219
• JP 2017003546 W 20170201

Abstract (en)

A scroll compressor is provided with: an annular thrust plate (32) provided within a housing and having a thrust bearing surface (32S) in contact with the rear surface of the end plate (21A) of an orbiting scroll (21); and a main balance weight (41) provided to a drive shaft (9) so as to be axially adjacent to the thrust plate (32) and cancelling centrifugal force caused by the eccentric orbiting movement of the orbiting scroll (21). The main balance weight (41) has a decreasing outer diameter section (41a) provided at the thrust plate (32)-side end of the main balance weight (41), the decreasing outer diameter section (41a) having an outer diameter gradually decreasing toward the thrust plate (32). The thrust plate (32) has an increasing inner diameter section (32a) on the main balance weight (41) side of the inner diameter section of the thrust plate (32), the increasing inner diameter section (32a) having an inner diameter gradually increasing toward the main balance weight (41). The decreasing outer diameter section (41a) and the increasing inner diameter section (32a) overlap each other in the radial direction and the axial direction.

IPC 8 full level
F04C 18/02 (2006.01)

CPC (source: EP KR)
F04C 18/0215 (2013.01 - EP KR); **F04C 29/0021** (2013.01 - KR); **F04C 2240/807** (2013.01 - EP KR)

Cited by
US11201522B2; DE102019135378B4

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 3388673 A1 20181017; EP 3388673 A4 20181107; AU 2017220218 A1 20180719; AU 2017220218 B2 20190704;
CN 108431419 A 20180821; JP 2017145806 A 20170824; JP 6704751 B2 20200603; KR 20180094056 A 20180822;
WO 2017141703 A1 20170824

DOCDB simple family (application)
EP 17752966 A 20170201; AU 2017220218 A 20170201; CN 201780005700 A 20170201; JP 2016030061 A 20160219;
JP 2017003546 W 20170201; KR 20187019943 A 20170201