

Title (en)
VOLUTE STRUCTURE, CENTRIFUGAL COMPRESSOR AND REFRIGERATION DEVICE

Title (de)
SPIRALSTRUKTUR, ZENTRIFUGALVERDICHTER UND KÜHLVORRICHTUNG

Title (fr)
STRUCTURE EN VOLUTE, COMPRESSEUR CENTRIFUGE ET DISPOSITIF DE RÉFRIGÉRATION

Publication
EP 3208471 A4 20180530 (EN)

Application
EP 14903991 A 20141226

Priority
• CN 201410549697 A 20141016
• CN 2014095093 W 20141226

Abstract (en)
[origin: EP3208471A1] The present application discloses a volute structure, a centrifugal compressor and a refrigeration device. The volute structure comprises: a cabinet (8), a volute casing (1) and a backflow device (5); the volute casing (1) comprises an inner volute and an outer volute separately provided, a fluid flow passage being formed between the inner volute and outer volute, and the inner volute and backflow device (5) being disposed together. The present application increases the length of the first-stage diffuser, improving the diffusion effect of air entering the first-stage diffuser and thus enhancing the unit performance of the centrifugal compressor.

IPC 8 full level
F04D 17/12 (2006.01); **F04D 29/44** (2006.01)

CPC (source: CN EP US)
F04D 17/12 (2013.01 - EP US); **F04D 17/122** (2013.01 - US); **F04D 25/16** (2013.01 - US); **F04D 29/403** (2013.01 - US);
F04D 29/4206 (2013.01 - EP US); **F04D 29/441** (2013.01 - CN); **F04D 29/624** (2013.01 - US); **F04D 29/628** (2013.01 - US)

Citation (search report)
• [X] CN 103206389 A 20130717 - ZHUHAI GREE ELEC APPLIANCES
• [X] CN 203670285 U 20140625 - CHONGQING MIDEA GENERAL REFRIGERATING EQUIPMENT CO LTD
• [X] JP 5369198 B2 20131218
• See references of WO 2016058271A1

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 3208471 A1 20170823; EP 3208471 A4 20180530; CN 104454652 A 20150325; CN 104454652 B 20170725; US 2017306981 A1 20171026;
WO 2016058271 A1 20160421; WO 2016058379 A1 20160421

DOCDB simple family (application)
EP 14903991 A 20141226; CN 2014095093 W 20141226; CN 201410549697 A 20141016; CN 2015079241 W 20150519;
US 201415516108 A 20141226