

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALE

Publication
EP 2918841 A1 20150916 (EN)

Application
EP 13856394 A 20130917

Priority
• JP 2012257840 A 20121126
• JP 2013005482 W 20130917

Abstract (en)

To provide a scroll compressor which can reduce noise in a specific frequency range caused when a refrigerant mixture is used. A scroll compressor (1) of the present invention includes: a turning scroll (30) which is rotatably coupled with an eccentric pin (17A) of a main shaft (17); and a fixed scroll (20) which is opposed to the turning scroll (30) to thereby form a compression chamber for compressing a refrigerant and has an end plate in which a discharge port (23) for discharging the compressed refrigerant toward a high-pressure chamber (10B) is formed. The discharge port (23) is composed of an upstream port part (23A) which continues to the compression chamber and has an opening area (A1) and a downstream port part (33B) which continues to the upstream port part (23A) and has an opening area (A2) larger than the opening area (A1) of the upstream port part (23A), and a node of a vibration mode is generated at the border between the upstream port part (23A) and the downstream port part (23B).

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

CPC (source: CN EP)
F04C 18/0215 (2013.01 - CN EP); **F04C 18/0261** (2013.01 - CN EP); **F04C 29/12** (2013.01 - CN EP); **F04C 23/008** (2013.01 - CN EP);
F04C 2250/102 (2013.01 - CN EP); **F04C 2270/13** (2013.01 - EP)

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 2918841 A1 20150916; EP 2918841 A4 20151216; CN 104755762 A 20150701; CN 104755762 B 20161026; JP 2014105606 A 20140609;
JP 5951456 B2 20160713; WO 2014080553 A1 20140530

DOCDB simple family (application)

EP 13856394 A 20130917; CN 201380056491 A 20130917; JP 2012257840 A 20121126; JP 2013005482 W 20130917