

Title (en)
SCREW COMPRESSOR, AIR CONDITIONING DEVICE AND REFRIGERATING DEVICE

Title (de)
SCHRAUBENVERDICHTER, KLIMATISIERUNGSVORRICHTUNG UND KÜHLVORRICHTUNG

Title (fr)
COMPRESSEUR À VIS, DISPOSITIF DE CLIMATISATION ET DISPOSITIF DE RÉFRIGÉRATION

Publication
EP 3617516 A4 20200304 (EN)

Application
EP 17907068 A 20171228

Priority
• CN 201710283983 A 20170426
• CN 2017119427 W 20171228

Abstract (en)
[origin: EP3617516A1] Disclosed are a screw compressor, and a gas conditioning apparatus and a refrigeration apparatus including the screw compressor. The screw compressor includes a body (10), in which a gas-supplement channel is provided, and the gas-supplement channel has at least two gas-supplement holes (201) communicated with a compression chamber. A number of the gas-supplement holes in the screw compressor is at least two. In a case that space available in the body (10) for disposing the gas-supplement holes (201) is limited, a hole diameter of each of the gas-supplement holes (201) is smaller. A larger number of gas-supplement holes (201) with smaller hole diameter are beneficial for reducing gas flow pulsation, thereby reducing noise in a gas-supplement process.

IPC 8 full level
F04C 29/12 (2006.01); **F04C 18/16** (2006.01); **F04C 29/06** (2006.01)

CPC (source: CN EP US)
F04C 18/16 (2013.01 - CN EP US); **F04C 29/06** (2013.01 - CN EP US); **F04C 29/12** (2013.01 - CN EP); **F04C 29/12** (2013.01 - US); **F04C 2240/30** (2013.01 - US); **F04C 2250/10** (2013.01 - US); **F04C 2250/101** (2013.01 - CN EP US); **F24F 13/24** (2013.01 - US)

Citation (search report)
• [X] CN 205013302 U 20160203 - GREE ELECTRIC APPLIANCES INC
• [X] US 2010269797 A1 20101028 - PRIOR GREGORY P [US]
• [X] WO 2016186692 A1 20161124 - EATON CORP [US]
• [X] WO 2016200422 A1 20161215 - EATON CORP [US]
• [X] US 2007092393 A1 20070426 - EGAN WILLIAM C [US]
• [X] EP 2166229 A1 20100324 - DAIKIN IND LTD [JP]
• [X] EP 1666729 A1 20060607 - DAIKIN IND LTD [JP]
• [X] JP S6285190 A 19870418 - KOBE STEEL LTD
• See references of WO 2018196427A1

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 3617516 A1 20200304; EP 3617516 A4 20200304; EP 3617516 B1 20211006; CN 106979160 A 20170725; PH 12019502419 A1 20200706; US 2020049148 A1 20200213; WO 2018196427 A1 20181101

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