

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALES

Publication
EP 4027015 A1 20220713 (EN)

Application
EP 21216050 A 20211220

Priority
JP 2021000330 A 20210105

Abstract (en)
A scroll compressor (1) includes: a casing (10); a discharge cover (100) dividing a space in the casing into a high-pressure side space (12b) and a low-pressure side space (12a); an orbital scroll (40) positioned in the low-pressure side space and which is eccentrically rotated with respect to the axis; and a fixed scroll (30) positioned between the discharge cover and the orbital scroll, a compression chamber (31) to which refrigerant introduced from the low-pressure side space being formed between the fixed and orbital scrolls. A discharge port (36) through which the refrigerant compressed in the compression chamber is discharged to the high-pressure side space is formed so as to be passed through the fixed scroll and the discharge cover, an annular injection space (S) surrounding the discharge port and a communication path communicating the injection space with the low-pressure side space are formed between the fixed scroll and the discharge cover, and the scroll compressor further includes an injection pipe (130) through which liquid refrigerant is introduced to the injection space from an outside thereof.

IPC 8 full level
F04C 18/02 (2006.01); **F04C 23/00** (2006.01); **F04C 29/00** (2006.01); **F04C 29/04** (2006.01)

CPC (source: EP)
F04C 18/0215 (2013.01); **F04C 23/008** (2013.01); **F04C 29/0007** (2013.01); **F04C 29/042** (2013.01)

Citation (applicant)
JP H0235153 B2 19900808

Citation (search report)
• [XDA] JP H0235153 B2 19900808
• [A] CN 107120271 A 20170901 - LG ELECTRONICS INC
• [A] AU 2010212403 A1 20100909 - EMERSON CLIMATE TECHNOLOGIES
• [A] EP 3508724 A1 20190710 - DAIKIN IND LTD [JP]

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 4027015 A1 20220713; **EP 4027015 B1 20231115**; **EP 4027015 C0 20231115**; JP 2022105791 A 20220715; JP 7483638 B2 20240515

DOCDB simple family (application)
EP 21216050 A 20211220; JP 2021000330 A 20210105