

Title (en)

SCROLL COMPRESSOR WITH DIRECT RETURN OF OIL FROM AN OIL SEPARATOR INTO A COMPRESSION PORTION

Title (de)

SPIRALVERDICHTER MIT DIREKTER ÖLRÜCKFÜHRUNG VON EINEM ÖLABSCHEIDER IN EINEN KOMPRESSIONSABSCHNITT

Title (fr)

COMPRESSEUR À SPIRALE À RETOUR DIRECT D'HUILE D'UN SÉPARATEUR D'HUILE DANS UNE PARTIE DE COMPRESSION

Publication

EP 4285028 A1 20231206 (DE)

Application

EP 22701957 A 20220125

Priority

- DE 102021101627 A 20210126
- EP 2022051608 W 20220125

Abstract (en)

[origin: WO2022161941A1] Scroll compressor (1), comprising: – a compression portion (10) having an inlet (11) for drawing a fluid into the compression portion (10), an outlet (12) for expelling the compressed fluid, a stationary plate (20) having a stationary spiral (21) and an orbiting plate (30) having an orbiting spiral (31), wherein the orbiting plate (30) can be made to orbit relative to the stationary plate (20), – an oil separator (45) for separating oil from the compressed fluid and a direct oil return line (50) for direct return of oil from the oil separator (45) to the compression portion (10), wherein the direct oil return line (50) has at least one discharge opening (59a, 59b). The direct oil return line (50) also comprises an outgassing chamber (54) arranged between the first flow valve (53) and the discharge opening (59a, 59b), and a fluid return line (70) for returning fluid from the outgassing chamber (54) into the compression portion (10).

IPC 8 full level

F04C 18/02 (2006.01); **F04C 29/02** (2006.01)

CPC (source: EP KR)

F04C 18/0215 (2013.01 - EP KR); **F04C 18/0261** (2013.01 - EP KR); **F04C 29/026** (2013.01 - EP KR); **F04C 29/028** (2013.01 - EP KR); **F04C 29/12** (2013.01 - EP KR); **F04C 2220/40** (2013.01 - EP KR)

Citation (search report)

See references of WO 2022161941A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021101627 A1 20220728; **DE 102021101627 B4 20230504**; CN 117255896 A 20231219; EP 4285028 A1 20231206; JP 2024503927 A 20240129; KR 20230132587 A 20230915; WO 2022161941 A1 20220804

DOCDB simple family (application)

DE 102021101627 A 20210126; CN 202280027003 A 20220125; EP 2022051608 W 20220125; EP 22701957 A 20220125; JP 2023545261 A 20220125; KR 20237028968 A 20220125