

Title (en)
HERMETIC COMPRESSOR AND REFRIGERATION CYCLE APPARATUS

Title (de)
HERMETISCHER VERDICHTER UND KÜHLZYKLUSVORRICHTUNG

Title (fr)
COMPRESSEUR HERMÉTIQUE ET DISPOSITIF À CYCLE FRIGORIFIQUE

Publication
EP 3783225 A4 20220323 (EN)

Application
EP 19789323 A 20190402

Priority
• JP 2018081100 A 20180420
• JP 2019014694 W 20190402

Abstract (en)
[origin: EP3783225A1] To provide a compressor with high compression efficiency provided by increasing the design freedom with respect to the position for connecting an introduction path and an injection path of an injection flow path to improve manufacturability, and by reducing the back flow of refrigerant from a check valve of the injection flow path. An injection flow path (40) includes an injection path (41) opened to a cylinder chamber (19), a communication path (42) connected to the injection path (41), an introduction path (49) having one end side opened to the communication path (42) from an axial direction and the other end (54) to which an injection introduction pipe (70) connected to the outside of a sealed case is connected, and a check valve device (44) that opens and closes an opening portion (53) of the introduction path (49) on the communication path (42) side and blocks a flow of refrigerant from the cylinder chamber (19) to the introduction path (49). The check valve device (44) includes a reed valve (60), a valve retainer (64) that regulates the opening degree of the reed valve (60), and a fixing member (65) that fixes the reed valve (60) and the valve retainer (64).

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
• [A] US 9909587 B2 20180306 - YANG GUOYONG [CN], et al
• [A] JP H0337391 A 19910218 - HITACHI LTD
• [A] US 3568712 A 19710309 - RINEHART DEAN C
• [A] US 2012174618 A1 20120712 - OGATA TAKESHI [JP], et al
• See references of WO 2019202976A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3783225 A1 20210224; **EP 3783225 A4 20220323**; **EP 3783225 B1 20230510**; CN 112055785 A 20201208; CN 112055785 B 20220531; JP 2019190302 A 20191031; JP 7066495 B2 20220513; WO 2019202976 A1 20191024

DOCDB simple family (application)
EP 19789323 A 20190402; CN 201980026962 A 20190402; JP 2018081100 A 20180420; JP 2019014694 W 20190402