

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2021 年 4 月 1 日 (01.04.2021)



(10) 国际公布号
WO 2021/056795 A1

(51) 国际专利分类号:
F04C 29/00 (2006.01) *F04C 29/02* (2006.01)

(21) 国际申请号: PCT/CN2019/120826

(22) 国际申请日: 2019 年 11 月 26 日 (26.11.2019)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
201910923601.2 2019 年 9 月 24 日 (24.09.2019) CN

(71) 申请人: 广东美芝制冷设备有限公司
(GUANGDONG MEIZHI COMPRESSOR CO., LTD.)
[CN/CN]; 中国广东省佛山市顺德区顺峰山工业开发区, Guangdong 528311 (CN)。

(72) 发明人: 李洋(LI, Yang); 中国广东省佛山市顺德区顺峰山工业开发区, Guangdong 528311 (CN)。
曹红军(CAO, Hongjun); 中国广东省佛山市顺德区顺峰山工业开发区, Guangdong 528311 (CN)。

朱松(ZHU, Song); 中国广东省佛山市顺德区顺峰山工业开发区, Guangdong 528311 (CN)。

(74) 代理人: 北京友联知识产权代理事务所(普通合伙)(YOULINK INTELLECTUAL PROPERTY LAW FIRM); 中国北京市海淀区学清路8号科技财富中心A座506室尚志峰, Beijing 100192 (CN)。

(81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW。

(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ,

(54) Title: BAFFLE PLATE FOR COMPRESSOR, COMPRESSOR, AND REFRIGERATION APPARATUS

(54) 发明名称: 用于压缩机的挡板、压缩机及制冷设备

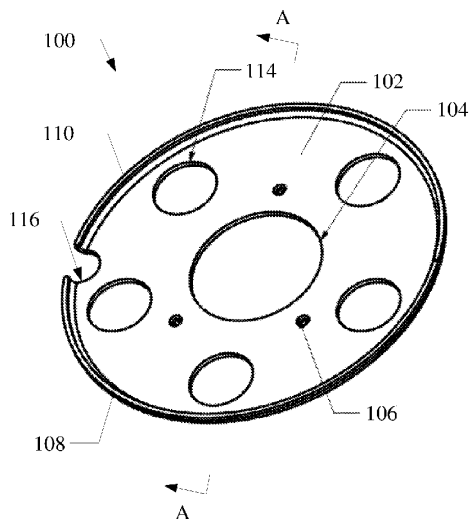


图 1

(57) Abstract: Provided are a baffle plate for a compressor, a compressor, and a refrigeration apparatus. The baffle plate (100) comprises a plate body (102), a through hole (104), a connection portion (106), a flange (108), an arc transition portion (110), an exhaust through hole (112) and an assembly avoidance hole (114), wherein the through hole (104) is provided in the plate body (102), and the plate body (102) extends from the through hole (104) in a direction away from an axis of the through hole (104); the connection portion (106) is connected to the plate body (102) and is used for connecting the plate body (102) to a non-rotating member; the flange (108) is connected to an outer edge of the plate body (102); the arc transition portion (110) is connected between the plate body (102) and the flange (108); a radius of curvature of the arc transition portion (110) is 1 mm to 6 mm, and a central angle is 35° to 145°; and the exhaust through hole (112) and the assembly avoidance hole (114) are provided in the plate body (102). The baffle plate can create physical isolation for airflow flowing; a space for stabilizing a lubricating oil is formed at the side of the baffle plate that corresponds to an oil pool; a disturbance, of the lower cavity rotational flow caused by the rotation of an electric motor, to the oil pool is isolated; and

[见续页]

NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布：

— 包括国际检索报告 (条约第21条(3))。

fluctuations of an oil surface at the bottom of the compressor are reduced, such that oil drops caused by fluctuations are reduced, and the situation that excess lubricating oil is carried to an upper part of the electric motor by an airflow due to violent fluctuations of the oil surface is avoided.

(57) 摘要：一种用于压缩机的挡板、压缩机及制冷设备，其中挡板(100)包括板体(102)、通孔(104)、连接部(106)、翻边(108)、圆弧过渡部(110)、排气通孔(112)和装配避让孔(114)，通孔(104)设置在板体(102)上，板体(102)自通孔(104)朝向远离通孔(104)的轴线的方向延伸；连接部(106)与板体(102)相连接，用于将板体(102)连接至非转动件；翻边(108)与板体(102)的外边缘相连接，圆弧过渡部(110)连接在板体(102)和翻边(108)之间，圆弧过渡部(110)的曲率半径为1mm至6mm，圆心角为 35° 至 145° ；排气通孔(112)和装配避让孔(114)均设置在板体(102)上。该挡板可对气流流动形成物理隔离，在挡板对应于油池的一侧形成使润滑油稳定的空间，隔离电机旋转导致的下腔旋流对油池的扰动，减小压缩机底部的油面波动，进而减少因波动导致的油滴的形成，并防止油面的剧烈波动导致过多的润滑油被气流携带至电机上部。