

(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
2022 年 3 月 24 日 (24.03.2022)



(10) 国际公布号
WO 2022/057641 A1

(51) 国际专利分类号:

E01H 1/08 (2006.01) *F04D 29/70* (2006.01)
A47L 11/24 (2006.01) *B01D 46/24* (2006.01)
A47L 11/40 (2006.01) *A47L 9/22* (2006.01)

(21) 国际申请号: PCT/CN2021/116429

(22) 国际申请日: 2021 年 9 月 3 日 (03.09.2021)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:

202010982593.1 2020 年 9 月 17 日 (17.09.2020) CN
202010980795.2 2020 年 9 月 17 日 (17.09.2020) CN

(71) 申请人: 广东博智林机器人有限公司 (GUANGDONG BRIGHT DREAM ROBOTICS CO., LTD.) [CN/CN]; 中国广东省佛山市顺德

区北滘镇碧桂园社区泮浦路 1 号 A1 栋 2 楼 A2-05, Guangdong 528000 (CN)。

(72) 发明人: 郭明开 (GUO, Mingkai); 中国广东省佛山市顺德区北滘镇碧桂园社区泮浦路 1 号 A1 栋 2 楼 A2-05, Guangdong 528000 (CN)。肖志鸿 (XIAO, Zhihong); 中国广东省佛山市顺德区北滘镇碧桂园社区泮浦路 1 号 A1 栋 2 楼 A2-05, Guangdong 528000 (CN)。孙鹏淋 (SUN, Penglin); 中国广东省佛山市顺德区北滘镇碧桂园社区泮浦路 1 号 A1 栋 2 楼 A2-05, Guangdong 528000 (CN)。曾德聪 (ZENG, Decong); 中国广东省佛山市顺德区北滘镇碧桂园社区泮浦路 1 号 A1 栋 2 楼 A2-05, Guangdong 528000 (CN)。

(54) Title: FLOOR CLEANING DEVICE

(54) 发明名称: 地面清洁设备

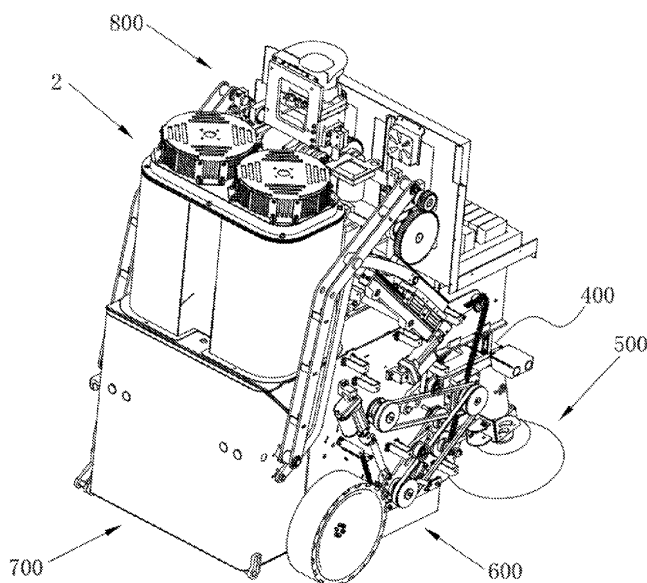


图 2

(57) Abstract: A floor cleaning device. An edge brush apparatus thereof is mounted at the bottom of the front part of a frame, a roller brush apparatus is mounted at the bottom of the center part of the frame, a trash bin is mounted at the bottom of the rear part of the frame and is in communication with the roller brush apparatus, and a filter cartridge apparatus is mounted at the top of the rear part of the frame. The filter cartridge apparatus comprises a filter cartridge mechanism and a blower mechanism, the filter cartridge mechanism comprises a housing and at least two filter cartridges, and the at least two filter cartridges are arranged in parallel vertically perpendicular

[见续页]



WO 2022/057641 A1

(74) 代理人: 北京品源专利代理有限公司 (BEYOND ATTORNEYS AT LAW); 中国北京市海淀区莲花池东路39号西金大厦6层, Beijing 100036 (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, IT, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, 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))。

to the heading direction of the frame. The upper end of the housing is sealedly connected to the periphery of the blower mechanism. An air discharge duct, which communicates with the blower mechanism, is formed at the interior of each filter cartridge, and an air intake duct is formed between each filter cartridge and an inner wall of the housing. The lower ends of the filter cartridges are sealed, and the lower end of the housing is provided with an opening. An air inlet is formed between the edge of the opening and each filter cartridge, and the air inlet communicates with the roller brush apparatus and the edge brush apparatus.

(57) 摘要: 一种地面清洁设备, 其边刷装置安装在车架的前部下方, 滚刷装置安装在车架的中部下方, 垃圾箱安装在车架的后部下方, 垃圾箱与滚刷装置连通, 滤芯装置安装在车架的后部上方, 滤芯装置包括滤芯机构和风机机构, 滤芯机构包括壳体和至少两个滤芯, 至少两个滤芯沿垂直于车架的前进方向竖直并排设置, 壳体的上端与风机机构的周部密闭连接, 滤芯内部形成与风机机构连通的出风通道, 滤芯与壳体内壁之间形成进风通道, 滤芯的下端封闭, 壳体的下端设置有敞口, 敞口的边缘与滤芯之间形成进风口, 进风口与滚刷装置和边刷装置连通。