

(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



(10) 国际公布号
WO 2023/221979 A1

(43) 国际公布日
2023 年 11 月 23 日 (23.11.2023)

(51) 国际专利分类号:
H04L 49/00 (2022.01)

(21) 国际申请号: PCT/CN2023/094536

(22) 国际申请日: 2023 年 5 月 16 日 (16.05.2023)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202210529988.5 2022 年 5 月 16 日 (16.05.2022) CN

(71) 申请人: 广州市百果园信息技术有限公司 (GUANGZHOU BAIGUOYUAN INFORMATION TECHNOLOGY CO., LTD.) [CN/CN]; 中国广东省广州市番禺区市桥街兴泰路 274 号 C 栋西塔 5-13 层, Guangdong 511402 (CN)。

(72) 发明人: 罗增铨 (LUO, Zengcheng); 中国广东省广州市番禺区市桥街兴泰路 274 号 C 栋西塔 5-13 层, Guangdong 511402 (CN)。

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD,

(54) Title: CONTROL METHOD AND APPARATUS FOR VIRTUAL ROBOT, AND DEVICE, STORAGE MEDIUM AND PROGRAM PRODUCT

(54) 发明名称: 虚拟机器人的控制方法、装置、设备、存储介质及程序产品

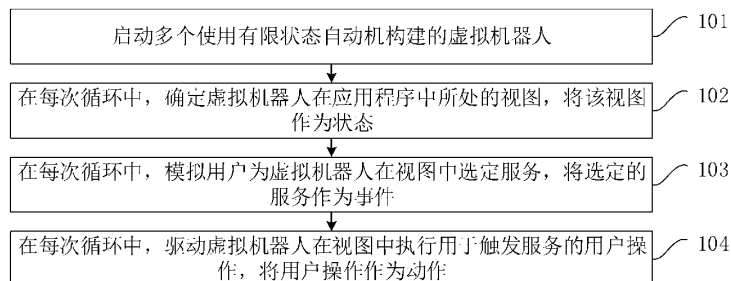


图 1

- 101 Start a plurality of virtual robots which are constructed by using a finite state automaton
- 102 In each cycle, determine a view where the virtual robots are located in an application program, and take the view as a state
- 103 In each cycle, simulate a user to select services for the virtual robots in the view, and take the selected services as events
- 104 In each cycle, drive the virtual robots to execute, in the view, user operations for triggering the services, and take the user operations as actions

(57) Abstract: Provided in the present application are a control method and apparatus for a virtual robot, and a device, a storage medium and a program product. The control method for a virtual robot comprises: starting a plurality of virtual robots which are constructed by using a finite state automaton, wherein the virtual robots are used for cyclically simulating a user to operate an application program several times; in each cycle, determining a view where the virtual robots are located in the application program, and taking the view as a state; in each cycle, simulating the user to select services in the view, and taking the selected services as events; and in each cycle, driving the virtual robots to execute, in the view, user operations for triggering the service, and taking the user operations as actions.

[见续页]

WO 2023/221979 A1

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, CV, GH, GM, KE, LR, LS, MW, MZ,
NA, RW, SC, 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, ME, 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))。

(57) 摘要: 本申请提供了一种虚拟机器人的控制方法、装置、设备、存储介质及程序产品, 该虚拟机器人的控制方法包括: 启动多个使用有限状态自动机构建的虚拟机器人, 虚拟机器人用于多次循环模拟用户操作应用程序, 在每次循环中, 确定虚拟机器人在应用程序中所处的视图, 将该视图作为状态, 在每次循环中, 模拟用户在视图中选定服务, 将选定的服务作为事件, 在每次循环中, 驱动虚拟机器人在视图中执行用于触发服务的用户操作, 将用户操作作为动作。