

(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 2023/036292 A1

(43) 国际公布日
2023 年 3 月 16 日 (16.03.2023)

(51) 国际专利分类号:

H04N 5/225 (2006.01) *G08B 17/06* (2006.01)
H04N 5/232 (2006.01) *G08B 17/10* (2006.01)
G03B 17/56 (2021.01)

(21) 国际申请号: PCT/CN2022/118087

(22) 国际申请日: 2022 年 9 月 9 日 (09.09.2022)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202111067904.2 2021 年 9 月 13 日 (13.09.2021) CN

(71) 申请人: 深圳耀德数据服务有限公司(SHENZHEN
YAODE DATA SERVICES CO., LTD.) [CN/CN]; 中
国广东省深圳市光明区玉塘街道长圳
社区高新技术园区海纳中心二期 3 栋
1203, Guangdong 518000 (CN)。

(72) 发明人: 刘文超(LIU, Wenchao); 中国广东省深圳
市光明区玉塘街道长圳社区高新技术园区海纳
中心二期 3 栋 1203, Guangdong 518000 (CN)。

(74) 代理人: 北京超凡宏宇专利代理事务所(特殊普
通合伙)(CHOFN INTELLECTUAL PROPERTY);
中国北京市海淀区北四环西路 68 号左岸工
社 1215-1218 室, Beijing 100080 (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, 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。

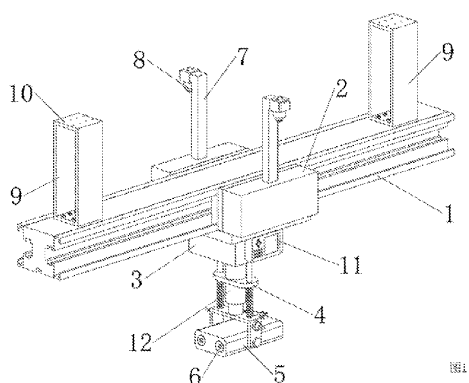
(84) 指定国(除另有指明, 要求每一种可提供的地区
保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ,
NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM,
AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT,
RO, RS, SE, SI, SK, SM, TR), 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))。

(54) Title: APPARATUS AND METHOD FOR QUICKLY SENSING DEVICE FAULT OF DATA CENTER MACHINE ROOM

(54) 发明名称: 一种数据中心机房设备故障快速感知的装置及方法



(57) Abstract: An apparatus and method for quickly sensing a device fault of a data center machine room, comprising a track. A mobile mechanism is slidably connected to the lower portion of the outer surface of the track; a control box is fixedly connected to the lower end of the mobile mechanism; a telescopic controller is movably connected to the middle of the lower end of the control box by means of a bearing; an adjustment mechanism is fixedly connected to the upper portion of the outer surface of the telescopic controller in a penetrating mode; a camera is movably connected to the lower portion of the outer surface of the adjustment mechanism; camera lenses are provided on the front portion and the rear portion of the left end of the camera; a displayer is fixedly connected to the middle of the front end of the control box; and fixing frames are fixedly connected to the front portion and the rear portion of the upper end of the mobile mechanism. The whole apparatus can perform mobile inspection according to a planned track route, such that whether a fault occurs in a device in the machine room can be rapidly sensed, the sensing efficiency is high, and the apparatus is suitable for wide application.

[见续页]

(57) 摘要：一种数据中心机房设备故障快速感知的装置及方法，包括轨道，轨道的外表面下部滑动连接有移动机构，移动机构的下端固定连接有控制箱，控制箱的下端中部通过轴承活动连接有伸缩控制器，伸缩控制器的外表面上部穿插固定连接有调节机构，调节机构的外表面下部活动连接有摄像机，摄像机的左端前部和左端后部均设置有摄像头，控制箱的前端中部固定连接有显示器，移动机构的上端前部和上端后部均固定连接有固定架。整个装置可按照规划好的轨道路线进行移动巡检，可快速的感知机房内的设备是否出现故障，感知效率高，适合广泛运用。