

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
10 September 2021 (10.09.2021)



(10) International Publication Number  
**WO 2021/178324 A1**

(51) International Patent Classification:

A63G 31/16 (2006.01) A63G 31/00 (2006.01)  
A63G 33/00 (2006.01)

(21) International Application Number:

PCT/US2021/020325

(22) International Filing Date:

01 March 2021 (01.03.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

16/806,722 02 March 2020 (02.03.2020) US

(71) Applicant: **UNIVERSAL CITY STUDIOS LLC**  
[US/US]; 100 Universal City Plaza, Universal City, California 91608 (US).

(72) Inventor: **SMITH, Michelle Elizabeth**; 1000 Universal Studios Plaza, Orlando, Florida 32819 (US).

(74) Agent: **POWELL, W. Allen** et al.; P.O. Box 692289, Houston, Texas 77269 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): 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) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

(54) Title: SYSTEMS AND METHODS FOR REACTIVE PROJECTION-MAPPED SHOW ROBOT

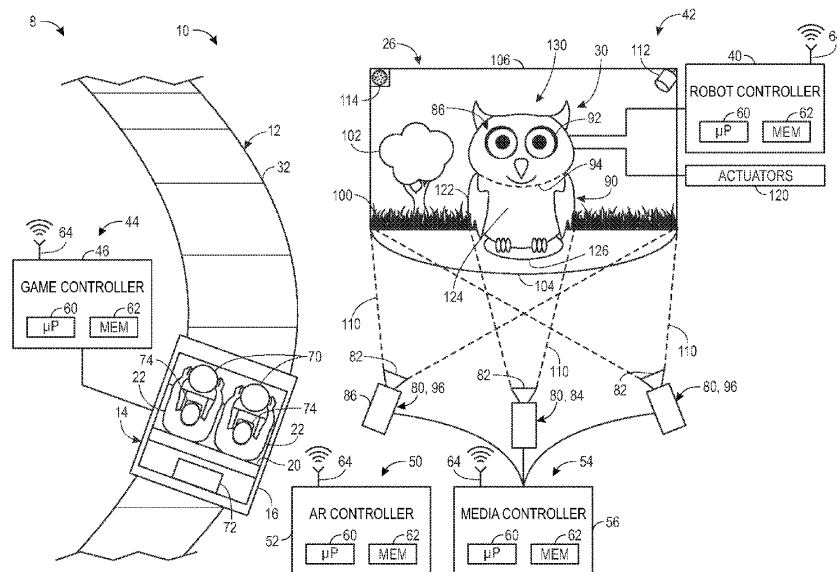


FIG. 1

(57) Abstract: An amusement attraction provides a reactive game experience to a guest. The amusement attraction includes a robot control system having a show robot and a robot controller communicatively coupled to the show robot. The robot controller is configured to instruct the show robot to execute a baseline performance, which is predetermined and stored within the robot controller. The robot controller is configured to receive game input from an input device and instruct the show robot to interrupt the baseline performance by executing a reactive performance comprising a sequence of reactive actions that is responsive to the game input. Additionally, the robot controller is configured to instruct the show robot to execute a connective performance that links an end of the sequence of the reactive actions back to the baseline performance.

[Continued on next page]

GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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).

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

**Published:**

- *with international search report (Art. 21(3))*