



(51) International Patent Classification:

A63F 13/285 (2014.01) A63F 13/27 (2014.01)
A63F 13/235 (2014.01) A63F 13/428 (2014.01)
A63F 13/837 (2014.01) A63F 13/426 (2014.01)

(21) International Application Number:

PCT/US2023/016807

(22) International Filing Date:

30 March 2023 (30.03.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/325,412 30 March 2022 (30.03.2022) US
18/127,552 28 March 2023 (28.03.2023) US

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(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, 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,

(54) Title: SYSTEMS AND METHODS FOR PRODUCING RESPONSES TO INTERACTIONS WITHIN AN INTERACTIVE ENVIRONMENT

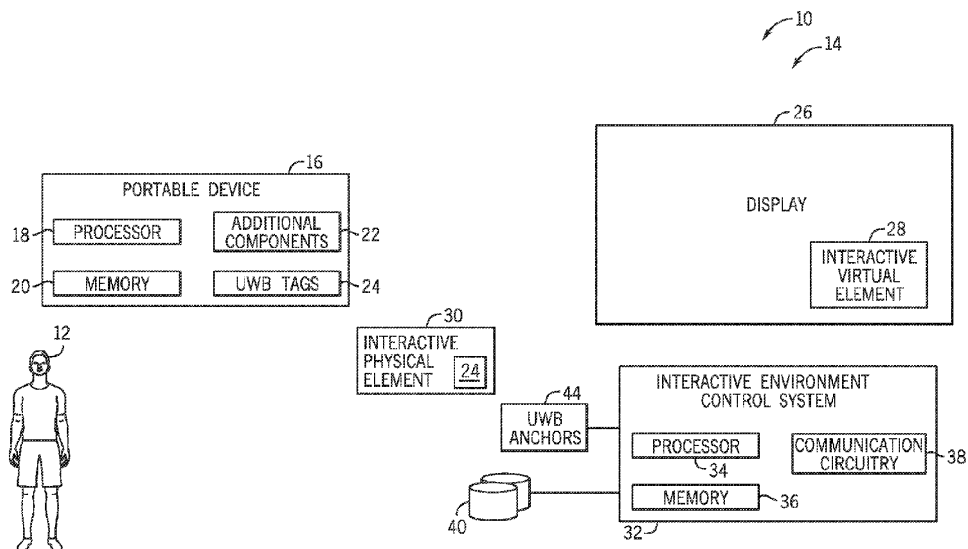


FIG. 1

(57) Abstract: An interactive system (10) includes a portable device (16) configured to be used in an interactive environment (14). The portable device (16) includes an input mechanism that initiates delivery of a virtual projectile (70). The interactive system (10) also includes a control system (32) that includes one or more processors (34). The one or more processors (34) receive data indicative of a location and an orientation of the portable device (16) and receive additional data indicative of actuation of the input mechanism. In addition, the one or more processors (34) determine a successful virtual interaction of an interactive physical element (30) with the virtual projectile (28), 70 based on the location and the orientation of the portable device 16 during the actuation of the input mechanism, and adjust an interactive virtual element (28) displayed on a display screen (26) in response to the successful virtual interaction of the interactive physical element (30).

[Continued on next page]

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

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))*