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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 October 2013 (24.10.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/156778 A1

(51) International Patent Classification:
G09B 19/00 (2006.01)

(21) International Application Number:
PCT/GB2013/050979

(22) International Filing Date:
18 April 2013 (18.04.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1206827.6 18 April 2012 (18.04.2012) GB

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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, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, 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, ML, MR, NE, SN, TD, TG).

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(54) Title: BALL GAME APPARATUS

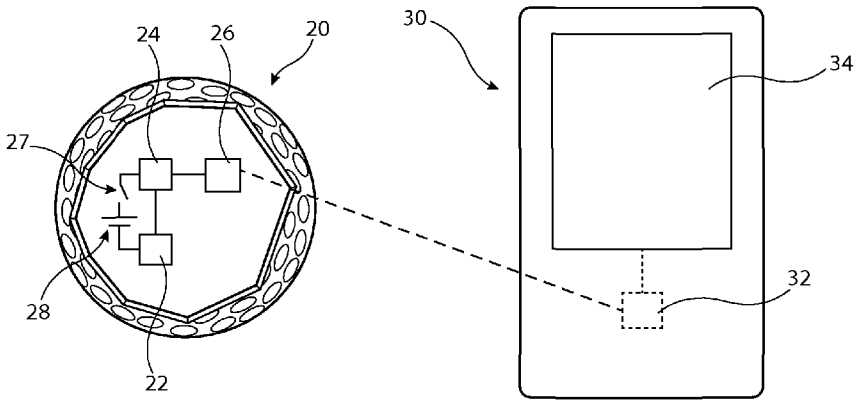

Fig. 2

(57) Abstract: A ball game apparatus comprises a control device (14, 24, 52, 60) which defines a predetermined range of allowable movements of a ball (10, 20, 40, 70) over space and time, sensing means (12, 22, 42) for detecting the actual movements of a ball, comparisonmeans for comparing an actual movement to the predetermined range of allowable movements, and indicating means (16, 34, 54, 62) for indicating the output of the said comparing. The sensing means (12, 22, 42) comprises a multi-axis accelerometer containedin the ball and having accelerometer, gyroscope and/or magnetometer functions. The ball may be activated by an internal magnetically-operated switch (17, 22, 47). The control device and indicating means can be incorporated in the ball itself or in a sep - arate portable computing device.

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