



US 20230231415A1

(19) **United States**(12) **Patent Application Publication**
BINDER(10) **Pub. No.: US 2023/0231415 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **DEVICE FOR DISPLAYING IN RESPONSE
TO A SENSED MOTION****G01P 1/07** (2006.01)**H02J 7/00** (2006.01)(71) Applicant: **May Patents Ltd.**, Hod Hasharon (IL)(72) Inventor: **Yehuda BINDER**, Ramat Gan (IL)(21) Appl. No.: **18/119,889**(22) Filed: **Mar. 10, 2023****Related U.S. Application Data**(60) Continuation of application No. 17/706,709, filed on Mar. 29, 2022, now Pat. No. 11,631,996, which is a continuation of application No. 17/175,646, filed on Feb. 13, 2021, now Pat. No. 11,305,160, which is a continuation of application No. 16/726,891, filed on
(Continued)**Publication Classification**(51) **Int. Cl.**

H02J 50/10 (2006.01)
G10H 1/26 (2006.01)
A63B 21/005 (2006.01)
A63H 33/18 (2006.01)
A63B 43/06 (2006.01)
A63B 69/00 (2006.01)
A63B 71/06 (2006.01)
G01P 1/08 (2006.01)
H02J 7/32 (2006.01)
A63B 43/00 (2006.01)
G08B 5/36 (2006.01)
G08B 21/18 (2006.01)
A63H 5/00 (2006.01)
A63H 29/22 (2006.01)
A63H 29/24 (2006.01)
A63H 33/26 (2006.01)
G01P 15/18 (2006.01)
A01K 15/02 (2006.01)
H02J 50/20 (2006.01)
H02J 50/90 (2006.01)

(52) **U.S. Cl.**

CPC **H02J 50/10** (2016.02); **G10H 1/26** (2013.01); **A63B 21/0055** (2015.10); **A63H 33/18** (2013.01); **A63B 43/06** (2013.01); **A63B 69/0053** (2013.01); **A63B 71/0622** (2013.01); **G01P 1/08** (2013.01); **H02J 7/32** (2013.01); **A63B 43/004** (2013.01); **G08B 5/36** (2013.01); **G08B 21/182** (2013.01); **A63H 5/00** (2013.01); **A63H 29/22** (2013.01); **A63H 29/24** (2013.01); **A63H 33/26** (2013.01); **G01P 15/18** (2013.01); **A01K 15/025** (2013.01); **H02J 50/20** (2016.02); **H02J 50/90** (2016.02); **G01P 1/07** (2013.01); **H05K 999/99** (2013.01); **H02J 7/0068** (2013.01); **G10H 2220/395** (2013.01); **G10H 2230/055** (2013.01); **A63B 2071/0625** (2013.01); **A63B 2220/803** (2013.01); **A63B 2220/833** (2013.01); **A63B 2071/0602** (2013.01); **A63B 2071/063** (2013.01); **A63B 2220/17** (2013.01); **A63B 2220/18** (2013.01); **A63B 2220/40** (2013.01); **A63B 2225/74** (2020.08); **A63B 2220/53** (2013.01); **A63B 2220/805** (2013.01); **A63B 2225/54** (2013.01); **A63B 2220/51** (2013.01); **A63B 2220/56** (2013.01)

(57)

ABSTRACT

A device includes a signaling means and a motion sensor, and logic for activating or controlling the signaling means in response to a sensed motion according to an embedded logic. The device may be used as a toy, and may be shaped like a play ball or as a handheld unit. It may be powered from a battery, either chargeable from an AC power source directly or contactless by using induction or by converting electrical energy from harvested kinetic energy. The embedded logic may activate or control the signaling means, predictably or randomly, in response to sensed acceleration magnitude or direction, such as sensing the crossing of a preset threshold or sensing the peak value. The visual means may be a numeric display for displaying a value associated with the count of the number of times the threshold has been exceeded or the peak magnitude of the acceleration sensed.

