

(12) **United States Patent**
Ying et al.

(10) **Patent No.:** **US 10,597,107 B2**
(45) **Date of Patent:** **Mar. 24, 2020**

- (54) **ELECTRIC VEHICLE**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: **16/658,020**
- (22) Filed: **Oct. 18, 2019**
- (65) **Prior Publication Data**
US 2020/0047839 A1 Feb. 13, 2020

Related U.S. Application Data

- (63) Continuation of application No. 16/429,636, filed on Jun. 3, 2019, now Pat. No. 10,486,764, which is a
(Continued)

Foreign Application Priority Data

Jun. 13, 2014 (CN) 2014 1 0262353

- (51) **Int. Cl.**
B62K 11/00 (2006.01)
B62D 61/02 (2006.01)
(Continued)
- (52) **U.S. Cl.**
CPC **B62K 11/007** (2016.11); **B62D 51/001**
(2013.01); **B62D 51/02** (2013.01);
(Continued)
- (58) **Field of Classification Search**
CPC B62K 11/007; B62K 3/002
See application file for complete search history.

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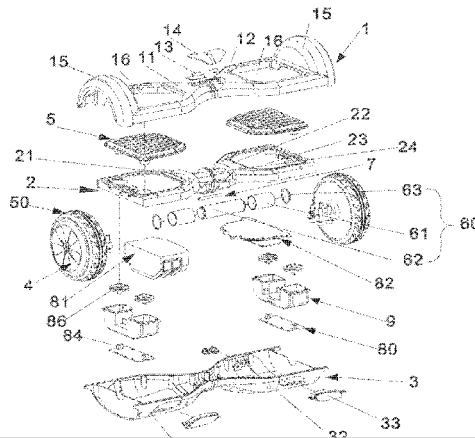
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Primary Examiner — Kevin Hurley

(57) **ABSTRACT**

An electric self-balancing vehicle including a top cover, a bottom cover, an inner cover, a rotating mechanism, two wheels, two hub motors, a plurality of sensors, a power supply, and a controller is described herein. The top cover includes a first top cover and a second top cover disposed symmetrically and rotatable relative to each other. The bottom cover is fixed to the top cover and includes a first bottom cover and a second bottom cover disposed symmetrically and rotatable relative to each other. The inner cover is fixed between the top cover and the bottom cover and includes a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other. The rotating mechanism is fixed between the first inner cover and the second inner cover. The two wheels are rotatably fixed at two sides of the inner cover, respectively. The two hub motors are fixed in the two wheels, respectively. The plurality of sensors is disposed between the bottom cover and the inner cover, respectively. The power supply is fixed between the first bottom cover and the first inner cover. The controller is fixed between the second bottom cover and the second inner cover, the controller is electrically connected

(Continued)



with the plurality of sensors, the power supply, and the hub motors, and the controller controls the hub motors to drive the corresponding wheels to rotate according to sensing signals transmitted by the sensors.

25 Claims, 6 Drawing Sheets

Related U.S. Application Data

continuation of application No. 15/160,589, filed on May 20, 2016, now Pat. No. 10,336,392, which is a continuation of application No. 14/773,650, filed as application No. PCT/CN2014/092849 on Dec. 2, 2014, now Pat. No. 9,376,155.

(51) **Int. Cl.**

B62D 51/02 (2006.01)
B62D 51/00 (2006.01)
B62K 17/00 (2006.01)
B62K 3/00 (2006.01)

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

CPC **B62D 61/02** (2013.01); **B62K 3/002** (2013.01); **B62K 17/00** (2013.01); **B62K 2204/00** (2013.01); **B62K 2207/00** (2013.01); **Y02T 10/7258** (2013.01)

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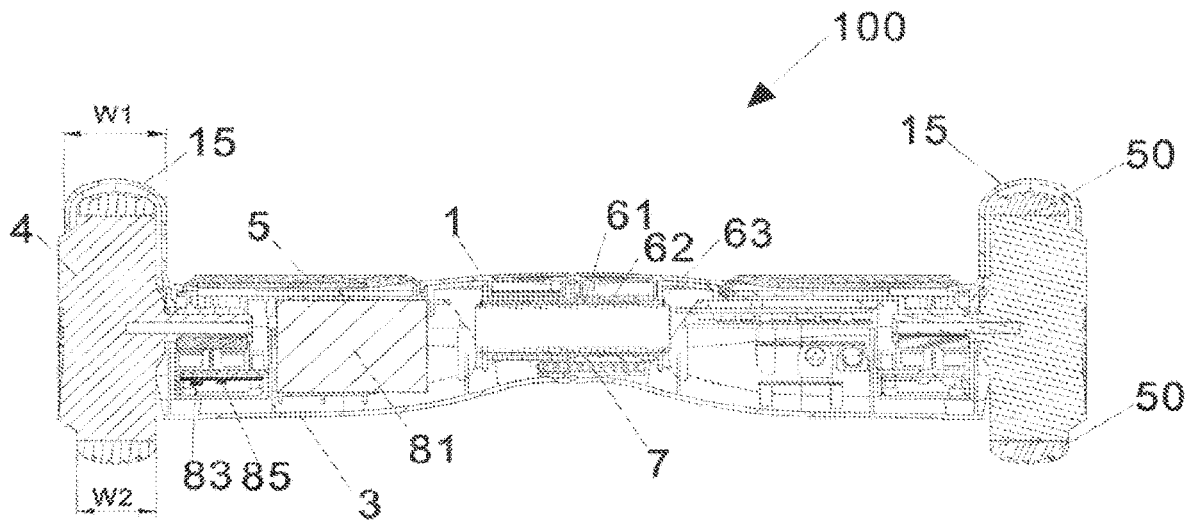


FIG. 1

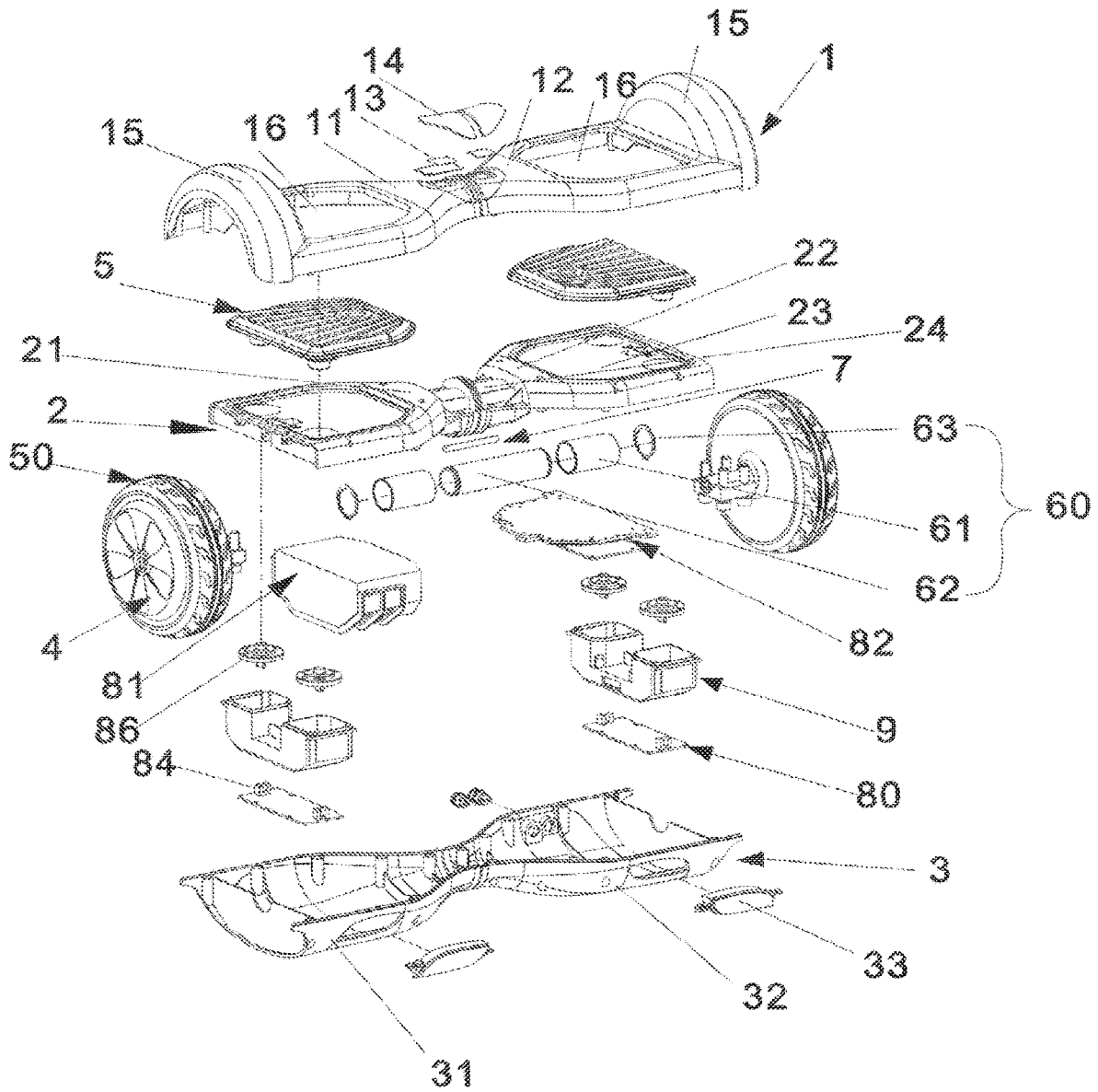


FIG. 2

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