

more surely when a rear-end collision occurs to the electric vehicle 10. In addition, as shown in FIGS. 4 and 5, the section 30e from the bent portion 30c to the rear end 30b of the brace 30 is inclined downward toward the rear end 30b. This also facilitates deformation of the brace 30 into the intended shape and pushes the spare tire 24 upward more surely when a rear-end collision occurs to the electric vehicle 10. On the other hand, the section 30d from the front end 30a to the bent portion 30c of the brace 30 extends horizontally along the longitudinal direction, although not particularly limited.

[0039] As described above, the front end 30a of the brace 30 is located below the hub mounting portion 26 of the spare tire 24. According to such a configuration, the brace 30, when deformed upon a rear-end collision, pushes up a portion of the spare tire 24 located rearward of the hub mounting portion 26. Due to this, the spare tire 24 is pushed upward while changing its posture, thus its frontward movement is more effectively suppressed. Further, the hub mounting portion 26 of the spare tire 24 is fixed to the front end 30a of the brace 30. The spare tire 24 being fixed to the brace 30 facilitates prediction on how the spare tire 24 will behave in accordance with the deformation of the brace 30.

[0040] In the electric vehicle 10 of the present embodiment, the brace 30 includes a tire contact surface 34 that contacts a side wall 28 of the spare tire 24 as shown in FIGS. 2, 4, and 5. At least a part of the tire contact surface 34 is located rearward of the bent portion 30c and protrudes from an upper surface of the brace 30. According to such a configuration, the brace 30 can stably support the spare tire 24 even on the section 30e inclined downward from the bent portion 30c toward the rear end 30b, regardless of the shape of the bent portion 30c (e.g., a bent angle thereof).

What is claimed is:

1. An electric vehicle, comprising:

a body;

a spare tire disposed in a rear portion of the body; and

a brace fixed to the body, extending along a vehicle longitudinal direction, and supporting the spare tire from below,

wherein

the brace comprises a front end fixed to the body, a rear end fixed to the body at a position rearward of the front end, and a bent portion located between the front end and the rear end, and

the bent portion of the brace is located above a straight line extending between the front end and the rear end of the brace.

2. The electric vehicle according to claim 1, wherein the body comprises a rear floor panel located below the spare tire and a back panel located rearward of the spare tire, the rear floor panel comprising a rear end connected to the back panel,

the front end of the brace is fixed to the rear floor panel, and

the rear end of the brace is fixed to the back panel.

3. The electric vehicle according to claim 2, wherein the rear floor panel comprises:

a front area to which the front end of the brace is fixed; and

a rear area extending between the front area and the back panel, the rear area being depressed downward relative to the front area.

4. The electric vehicle according to claim 1, wherein the rear end of the brace is located below the front end of the brace.

5. The electric vehicle according to claim 1, wherein a section of the brace from the bent portion to the rear end of the brace is inclined downward toward the rear end of the brace.

6. The electric vehicle according to claim 5, wherein a section of the brace from the front end to the bent portion extends horizontally.

7. The electric vehicle according to claim 1, wherein the front end of the brace is located below a hub mounting portion of the spare tire.

8. The electric vehicle according to claim 7, wherein the hub mounting portion of the spare tire is removably fixed to the front end of the brace.

9. The electric vehicle according to claim 1, wherein the brace comprises a contact surface that is in contact with a side wall of the spare tire.

10. The electric vehicle according to claim 9, wherein at least a portion of the contact surface is located rearward of the bent portion and protrudes from an upper surface of the brace.

11. The electric vehicle according to claim 1, further comprising a high voltage component located frontward of or below the spare tire.

12. The electric vehicle according to claim 11, wherein the high voltage component comprises at least one selected from a group consisting of: a motor configured to drive one or more wheels and a power control unit electrically connected to the motor.

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