

We claim:

1. An electrically driven vehicle (2, 2a) characterized by comprising:
a motor (9) for running;
a first battery (4; 40) that is configured to supply an electric power to the motor (9),
the first battery (4; 40) having a first capacity and a first output;
a second battery (3; 30) that is configured to supply an electric power to the motor (9),
the second battery (3; 30) having a second capacity and a second output;
a liquid-cooled cooler (70) that is configured to cool the first battery(4; 40); and
a temperature adjuster (71) that is configured to adjust a temperature of the second
battery (3; 30) using a gas as a heat medium,
wherein the second capacity is different from the first capacity, and the second output
is different from the first output.

2. The electrically driven vehicle as claimed in claim 1, wherein
the second output is higher than the first output, and
the second capacity is smaller than the first capacity.

3. The electrically driven vehicle as claimed in claim 1, wherein
the second output is lower than the first output, and
the second capacity is larger than the first capacity.

4. The electrically driven vehicle as claimed in any one of claims 1 to 3, wherein
the second battery (3; 30) is configured to be less frequently used than the first
battery (4; 40).

5. The electrically driven vehicle as claimed in any one of claims 1 to 4, further
comprising:

a circulation channel (16) that is configured to circulate a liquid cooling medium to
the first battery (4; 40) and another unit that is different from the first battery (4; 40); and

a heat exchanger (21; 31; 61) that is configured to exchange heat between the liquid cooling medium and air that is taken in by the temperature adjuster (71).

6. The electrically driven vehicle as claimed in claim 5, wherein the first battery (4; 40) is equipped with a water jacket (117), and the circulation channel (16) extends via the water jacket (117).

7. The electrically driven vehicle as claimed in claim 6, further comprising: a reserve tank (117) in which the liquid cooling medium is accumulated, wherein the circulation channel (16) extends via the reserve tank (117), and the water jacket (117) and the reserve tank (117) are integrated with each other.

8. The electrically driven vehicle (2a) as claimed in claim 7, wherein the temperature adjuster (71) is equipped with a first duct (61), the first duct (61) is in contact with the reserve tank (117) and the first duct (61) is configured to send air to the second battery (30), and

the temperature adjuster (71) is configured to send air to the second battery (30) through the first duct (61) when a temperature of the liquid cooling medium has exceeded a predetermined threshold temperature.

9. The electrically driven vehicle as claimed in claim 8, wherein an air flow channel (63) is provided between the reserve tank (117) and the second battery (30),

the temperature adjuster (71) is configured to supply air to the air flow channel (63) when the second battery (30) is in operation, and

the temperature adjuster (71) is configured to supply air to the second battery (30) when the second battery (30) is stopped.

10. The electrically driven vehicle as claimed in any one of claims 1 to 4, further

comprising:

an inverter (7) that is configured to convert an electric power of the first battery (4) and the second battery (3) into an alternating current and supply the alternating current to the motor (9);

a reserve tank (17) in which a liquid for temperature adjustment is accumulated; and

a circulation channel (16) that is configured to circulate the liquid among the first battery (4), the inverter, and the reserve tank (17), wherein

the reserve tank (17) is in contact with a first case (22) in which the first battery (4) is accommodated, and

the reserve tank (17) is in contact with a second case (21) in which the second battery (3) is accommodated.

11. The electrically driven vehicle as claimed in claim 10, wherein

a second duct (31) through which air sent to the second battery (3) flows is in contact with the reserve tank (17).

12. The electrically driven vehicle as claimed in claim 10, wherein

a second duct (31) through which air sent to the second battery (3) flows extends through an interior of the reserve tank (17).

13. The electrically driven vehicle as claimed in claim 4, wherein

the second battery (3; 30) is configured to, when the vehicle is caused to run in a steady manner, be less frequently used than the first battery (4; 40).

14. The electrically driven vehicle as claimed in claim 4, wherein

when the vehicle is caused to run in a steady manner, a sum of electric power that is output from the second battery (3; 30) is smaller than a sum of electric power that is output from the first battery (4; 40).

15. The electrically driven vehicle as claimed in claim 9, wherein
the temperature adjuster (71) is equipped with a flow channel switcher (62) that is
configured to switch over a supply destination of air introduced into the first duct (61), to
the air flow channel (63) or the second battery (30).

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