

CLAIMS

What is claimed is:

1. A radiator, used for heat dissipation of a remote radio unit, and comprising a tank and a heat dissipation component disposed in the tank, wherein

5 the heat dissipation component comprises a housing, the housing has an accommodation cavity for accommodating cooling liquid, there is a first opening on one side of the tank, and the heat dissipation component is in contact with a heat source component of the remote radio unit by using the first opening.

2. The radiator according to claim 1, wherein there is further a second opening on a side that
10 is of the tank and that is opposite to the first opening, and the heat dissipation component is disposed in the tank by using the second opening.

3. The radiator according to claim 2, wherein a first end that is of the heat dissipation component and that is close to the first opening is fixedly connected to the tank, and there ~~are~~ is
15 at least one of a protrusion and/or a groove on an outer side wall that is of the first end and that is in contact with an inner wall of the tank.

4. The radiator according to claim 3, wherein at least one of the protrusion and/or the groove
~~are~~ is located at an end that is of the heat dissipation component and that is close to the bottom of the tank, or at least one of the protrusion and/or the groove ~~are~~ is located at an end that is of the heat dissipation component and that is away from the bottom of the tank.

5. The radiator according to any one of claims 1 to 4, wherein the heat dissipation component
20 is fixedly disposed in the tank in a welding manner; and

the welding manner comprises at least one of friction stir welding, brazing, and laser welding.

6. The radiator according to any one of claims 1 to 4, further comprising a fastener, wherein
25 there are fastening holes cooperating with the fastener on the heat dissipation component and the tank, and the heat dissipation component is fixedly disposed in the tank through cooperation between the fastener and the fastening holes.

7. The radiator according to claim 6, further comprising a sealing layer, wherein the sealing layer is located between an outer wall of the heat dissipation component and the inner wall of the tank.

8. The radiator according to any one of claims 1 to 4, wherein the heat dissipation component
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is fixedly disposed in the tank in an in-mold hot mounting manner.

9. The radiator according to any one of claims 1 to 8, wherein the housing comprises a bottom plate, a top plate, and a plurality of heat sink fins disposed between the bottom plate and the top plate, the bottom plate, the top plate, and the heat sink fins are all hollow structures, and the hollow structures of the bottom plate, the heat sink fins, and the top plate are connected to form the accommodation cavity.

10. A method for manufacturing a radiator, wherein the radiator is used for heat dissipation of a remote radio unit, and the method comprises:

forming a heat dissipation component, wherein the heat dissipation component comprises a housing, and the housing comprises an accommodation cavity used to accommodate cooling liquid; and

forming a tank and disposing the heat dissipation component in the tank, wherein the heat dissipation component is in contact with a heat source component of the remote radio unit by using a first opening on one side of the tank.

11. The method for manufacturing a radiator according to claim 10, wherein the forming a tank and disposing the heat dissipation component in the tank comprises:

forming the tank; and

fixedly disposing the heat dissipation component in the tank in a welding manner.

12. The method for manufacturing a radiator according to claim 11, wherein the fixedly disposing the heat dissipation component in the tank in a welding manner comprises:

welding the heat dissipation component to the tank by using a friction stir welding process.

13. The method for manufacturing a radiator according to claim 11, wherein the fixedly disposing the heat dissipation component in the tank in a welding manner comprises:

welding the heat dissipation component to the tank by using a laser welding process.

14. The method for manufacturing a radiator according to claim 11, wherein the fixedly disposing the heat dissipation component in the tank in a welding manner comprises:

welding the heat dissipation component to the tank by using a brazing process.

15. The method for manufacturing a radiator according to claim 10, wherein the radiator further comprises a fastener;

after the forming a heat dissipation component, the method further comprises: forming a fastening hole on the heat dissipation component; and

the forming a tank and disposing the heat dissipation component in the tank comprises:
forming the tank, and forming the fastening hole on the tank; and
fixedly disposing the heat dissipation component in the tank through cooperation between the fastener and the fastening hole.

5 16. The method for manufacturing a radiator according to claim 15, wherein after the fixedly disposing the heat dissipation component in the tank through cooperation between the fastener and the fastening hole, the method further comprises:

forming a sealing layer between an outer wall of the heat dissipation component and an inner wall of the tank.

10 17. The method for manufacturing a radiator according to claim 10, wherein the forming a tank and disposing the heat dissipation component in the tank comprises:

providing a die-casting mold of the tank; and

placing the heat dissipation component in the die-casting mold, and forming the tank in a hot mounting die-casting manner, wherein the heat dissipation component is located in the tank.

15 18. The method for manufacturing a radiator according to any one of claims 10 to 17, wherein the forming a heat dissipation component comprises:

forming the heat dissipation component by using a brazing process.

19. A radio remote unit, comprising at least a heat source component and the foregoing radiator according to any one of claims 1 to 18, wherein a heat dissipation component in the
20 radiator is in contact with the heat source component.