**CLAIMS**

1. A insulation device for a battery, comprising:

a first cover layer including a first hole configured to act as a passage through which heat may move;

a second cover layer attached to one surface of the first cover layer and including a second hole configured to act as a passage through which heat may travel; and

a third cover layer disposed on the opposite surface to which the first cover layer is attached on the second cover layer,

wherein the insulation device includes an insulation part positioned within a void of the third cover layer, and

the insulation part includes a functional filler configured to improve the insulation performance of said insulation device,

wherein the functional filler includes an aerogel powder and the aerogel powder is included at 50 weight% to 100 weight% range based on the functional filler of 100 weight%, and

wherein a filling density of the functional filler included in the insulation part is in a 0.05 g/cm$^3$ to 0.20 g/cm$^3$ range.

2. The insulation device for the battery of claim 1, wherein

the average thickness of the first cover layer or the average thickness of the second cover layer is in a 10 μm to 50 μm range.

3. The insulation device for the battery of claim 1, wherein

the first cover layer includes at least one among a polyimide (PI) film, a polyethylene terephthalate (PET) film, a cyclo olefin polymer (COP) film, a cast polypropylene (CPP) film, and a nylon film.

4. The insulation device for the battery of claim 1, wherein

the filling density of the functional filler is in a 0.10 g/cm$^3$ to 0.15 g/cm$^3$ range.

5. The insulation device for the battery of claim 1, wherein

the second cover layer includes at least one of aluminum and mica.

6. The insulation device for the battery of claim 1, wherein

the average thickness of the third cover layer is in a 0.1 mm to 1.5 mm range.

7. The insulation device for the battery of claim 1, wherein

the third cover layer includes at least one of a glass fiber, a silica wool, a mineral wool, a ceramic wool, a woven fiber, and a non-woven fabric fiber.

8. The insulation device for the battery of claim 1, wherein

the third cover layer is configured of a material having a density of 30 g/m$^2$ to 200 g/m$^2$ range.

9. The insulation device for the battery of claim 1, wherein

the average thickness of the insulation device is 4 mm or less.

10. The insulation device for the battery of claim 1, wherein a sealing part is positioned on the edge of the second cover layer to attach the first cover layer, the second cover layer, and the third cover layer.

11. The insulation device for the battery of claim 10, wherein

the sealing part includes at least one of acryl-based adhesives, silicon-based adhesives, rubber-based adhesives, polyphthalate adhesives, PPA adhesives (acid modified polypropylene), and PEA adhesives (acid modified polyethylene).

12. The insulation device for the battery of claim 1, wherein
the average diameter of the first hole is 15 μm or less.

13. The insulation device for the battery of claim 12, wherein
the first cover layer includes a plurality of first holes, and
the interval between the first holes is 0.5 cm or less.

14. The insulation device for the battery of claim 1, wherein
the average diameter of the second hole is 15 μm or less.

15. The insulation device for the battery of claim 14, wherein
the second cover layer includes a plurality of second holes, and
the interval between the second holes is 0.5 cm or less.

16. The insulation device for the battery of claim 1, wherein
the first hole and the second hole are formed through a single process.

17. The insulation device for the battery of claim 1, wherein
the functional filler includes at least one of a fumed silica, and glass bubbles.

18. The insulation device for the battery of claim 1, wherein
the average particle diameter of the functional filler is 100 μm or less.

19. The insulation device for the battery of claim 1, wherein

the insulation part further includes a first additive.

20. The insulation device for the battery of claim 19, wherein

the first additive includes at least one among titanium dioxide ($TiO_2$), aluminum oxide ($Al_2O_3$) and iron oxide ($Fe_2O_3$).

21. The insulation device for the battery of claim 19, wherein

the content of the first additive is in a 1 weight% to 20 weight% range based on the functional filler at 100 weight%.

22. The insulation device for the battery of claim 1, wherein

the insulation part further includes a second additive.

23. The insulation device for the battery of claim 22, wherein

the second additive includes at least one among magnesium hydroxide (MDH), aluminum hydroxide (ATH), zinc borate, GREP-EG (graphite), and antimony trioxide.

24. The insulation device for the battery of claim 22, wherein

the content of the second additive is in a 1 weight% to 20 weight% range for the functional filler at 100 weight%.

25. The insulation device for the battery of claim 1, wherein

an adhesive layer is disposed between the second cover layer and the third cover layer to attach the second cover layer and the third cover layer.

26. The insulation device for the battery of claim 25, wherein

the adhesive layer includes at least one of a polyester film, a polypropylene film, a polyurethane film, an ethylene vinyl acetate (EVA) film, a polyolefin film, a polyamide film, a polyethylene terephthalate (PET) film, and an acrylate film.

27. The insulation device for the battery of claim 26, wherein

the adhesive layer includes a third hole, and

the third hole is formed with the first hole and the second hole through a single process.