Claims

1. An external wall panel for a cover structure for at least partially covering electrical equipment, the external wall panel comprising:

a printed circuit board (PCB) integrated with the external wall panel, such that the PCB and the external wall panel share a first surface and a second surface opposite the first surface;

a set of electrical points disposed on the first surface and/or the second surface, the electrical points configured for receiving electrical connections from externally of the PCB and/or internally from the PCB; and

the PCB further comprising electrical conduits embedded therein for internally connecting to the electrical points on the PCB,

wherein the external wall panel is configured to provide structural support for the cover structure without additional support structures at the first surface or the second surface, such that the first surface and the second surface are substantially exposed for receiving electrical connections from externally of the PCB; and

wherein the external wall panel is coupleable to one or more other external wall panels to form the cover structure.

2. The external wall panel according to claim 1, wherein the electrical equipment comprises an electrical power generating device, the electrical power generating device comprising a fuel cell stack or system.

3. The external wall panel according to claim 1 or 2, further comprising a set of openings through the first surface and the second surface, the openings configured for providing ventilation for the electrical equipment.

4. The external wall panel according to claim 3, further comprising a set of mounting elements on the first surface and/or the second surface, the mounting elements configured for mounting a set of air-flow inducing devices to the openings.

5. The external wall panel according to any one of claims 1 to 4, wherein the PCB occupies at least half of the external wall panel.

6. The external wall panel according to any one of claims 1 to 5, wherein the PCB occupies at least 80% of the external wall panel.

7. The external wall panel according to any one of claims 1 to 5, wherein the electrical points comprise electrical measurement probing points configured for electrically connecting to the PCB.

8. A computer program comprising computer executable instructions that, when executed by a processor, cause the processor to control an additive manufacturing apparatus to manufacture a product comprising the external wall panel according to any one of claims 1 to 7.

9. A method of manufacturing a product via additive manufacturing, the method comprising:

obtaining an electronic file representing a geometry of the product wherein the product comprises the external wall panel according to any one of claims 1 to 7; and

controlling an additive manufacturing apparatus to manufacture, over one or more additive manufacturing steps, the product according to the geometry specified in the electronic file.

10. A cover structure for at least partially covering electrical equipment, the cover structure comprising a plurality of external wall panels coupled together, at least one external wall panel comprising:

a printed circuit board (PCB) integrated with the at least one external wall panel, such that the PCB and the at least one external wall panel share a first surface and a second surface opposite the first surface;

a set of electrical points disposed on the first surface and/or the second surface, the electrical points configured for receiving electrical connections from externally of the PCB and/or internally from the PCB; and

the PCB further comprising electrical conduits embedded therein for internally connecting to the electrical points on the PCB,

wherein the at least one external wall panel is configured to provide structural support for the cover structure without additional support structures at the first surface or the second surface, such that the first surface and the second surface are substantially exposed for receiving electrical connections from externally of the PCB.

11. The cover structure according to claim 10, wherein the at least one external wall panel is removable from the cover structure.

12. The cover structure according to claim 10 or 11, wherein the at least one external wall panel comprises a set of openings through the first surface and the second surface, the openings configured for providing ventilation for the electrical equipment.

13. The cover structure according to claim 12, wherein the at least one external wall panel comprises a set of mounting elements on the first surface and/or the second surface, the mounting elements configured for mounting a set of air-flow inducing devices to the openings.

14. The cover structure according to any one of claims 10 to 13, wherein the PCB occupies at least half of the at least one external wall panel.

15. The cover structure according to any one of claims 10 to 14, wherein the PCB occupies at least 80% of the at least one external wall panel.

16. The cover structure according to any one of claims 10 to 15, wherein the electrical equipment comprises an electrical power generating device, the electrical power generating device comprising a fuel cell stack or system.

17. The cover structure according to claim 16, wherein electrical connectors of the fuel cell stack or system are solderable to the electrical points of the at least one external wall panel.

18. The cover structure according to any one of claims 10 to 17, wherein the external wall panels are coupled by soldering with pin connectors.

19. The cover structure according to any one of claims 10 to 18, wherein the electrical points comprise electrical measurement probing points configured for electrically connecting to the PCB.

20. A computer program comprising computer executable instructions that, when executed by a processor, cause the processor to control an additive manufacturing apparatus to manufacture a product comprising the cover structure according to any one of claims 10 to 19.

21. A method of manufacturing a product via additive manufacturing, the method comprising:

obtaining an electronic file representing a geometry of the product wherein the product comprises the cover structure according to any one of claims 10 to 19; and

controlling an additive manufacturing apparatus to manufacture, over one or more additive manufacturing steps, the product according to the geometry specified in the electronic file.