CLAIMS

1. A solar module (1) comprising:

a solar laminate (3) comprising a plurality of solar cells (9) interposed between a transparent front cover sheet (13) and a rear cover sheet (15);

a frame (5) enclosing the solar laminate (3) at lateral edges of the solar laminate (3);

at least one reinforcement strut (7) arranged at a rear surface of the solar laminate (3) and extending from a first lateral edge of the frame (5) to an opposing second lateral edge of the frame (5);

a spacer element (43) cooperating with the frame (5) such as to push the reinforcement strut (7) in a direction towards the laminate (3);

wherein the frame (5) has a frame surface and a frame thickness, the frame surface being defined by a length of the frame (5) multiplied by a width of the frame (5); and

wherein a ratio between the frame surface and the frame thickness is between 45000 and 70000, preferably between 50000 and 65000 and more preferably between 53000 and 57000, with dimensions of the frame being measured in millimetres;

wherein the spacer element (43) and the reinforcement strut (7) comprise two separate and non-integral elements.

2. The solar module of claim 1, wherein the frame (5) has a thickness of less than 35 mm, preferably less than 33 mm and more preferably less than 31 mm.

3. The solar module of one of claims 1 and 2, wherein the frame (5) has a length of 1665 ± x mm, a width of 991 ± y mm and a thickness of 30 ± z mm, with x, y, z being tolerances with $x < 5$ mm, $y < 5$ mm and $z < 2$ mm, preferably $x < 3$ mm, $y < 3$ mm and $z < 1$ mm.

4. The solar module of one of claims 1 to 3, wherein the front cover sheet (13) comprises a glass sheet (14) with a thickness of between 2.7 mm and 3.1 mm, preferably with a thickness of 3.05 mm.

5. The solar module of one of the preceding claims, wherein the reinforcement strut (7) is electrically connected to the frame (5).

6. The solar module of one of the preceding claims, the frame comprising elongate hollow profiles (19) with a first flange (21) extending from an upper part of the hollow profile (19) thereby forming a clamping portion (27) for clamping the laminate (3) between the first flange (21) and the hollow profile (19) and a second flange (29) extending from a lower part of the hollow profile (19) in a direction towards a centre of the frame (5).

7. The solar module of claim 6, wherein ends of the reinforcement strut (7) are interposed between the laminate (3) and the second flange (29) of the frame (5).

8. The solar module of claim 7, wherein the spacer element (43) is interposed between an end of the reinforcement strut (7) and the second flange (29) of the frame (5).

9. The solar module of one of the preceding claims, wherein the spacer element (43) is made with an electrically conductive material.

10. The solar module of claim 9, wherein the spacer element (43) comprises at least one ridge (45) pressed into the frame (5).

11. The solar module of one of the preceding claims, wherein the spacer element (43) is screwed to the frame (5).

12. The solar module of one of the preceding claims, wherein the reinforcement strut (7) is glued to a rear surface of the laminate (3).

13. The solar module of one of the preceding claims, wherein the at least one reinforcement strut (7) is arranged in parallel to a short edge of the frame (5).

14. The solar module of one of the preceding claims, comprising at least two reinforcement struts (7) arranged in parallel to each other.

15. The solar module of one of the preceding claims, wherein the reinforcement strut (7) has a rectangular cross-section.