CLAIMS

1. Device for attaching a solar panel comprising at least two retaining elements, suitable for retaining a panel by engaging with two opposing parts of the solar panel, at least one of the retaining elements being movable in a direction defined by a guide system and in such a way as to allow an adjustment of the spacing between the two retaining elements characterised in that it comprises:
- an assembly comprising a fixed support and said mobile retaining element, said mobile retaining element, and said fixed support consisting respectively of two synthetic parts, in particular plastic parts, the guide system being produced by mutually engaging structures between said mobile retaining element, and said fixed support produced as a one-piece component with said parts forming said fixed support and said mobile retaining element.

2. Device according to claim 1, comprising said mobile retaining element, comprises a hook intended to engage with the frame, said hook being a one-piece component with said part forming said mobile retaining element.

3. Device according to claim 2, wherein the hook has a converging inner structure and is arranged in such a way as to provoke a clamping of the flange of the frame when the hook of the mobile retaining element is displaced in the direction of the flange of the frame.

4. Device according to one of claims 2 or 3, wherein the hook is turned outwards and in such a way as to engage with a lower flange of the frame, when the two retaining elements engaging with the two opposing parts of the solar panel are separated from one another.

5. Device according to claim 4, comprising an abutment system, removable attached to said retaining element, able to prohibit the withdrawal of the

lower flange of the frame of the solar panel, by the creation of an abutment, with the frame of the panel taken, imprisoned between the hook, internal to the frame of the solar panel, and the abutment system, external to said frame of the solar panel.

6. Device according to claim 5, wherein the abutment system comprises a plastic element, and means for reversible snap-fitting distributed between said plastic element and said retaining element.

7. Device according to claim 6, wherein the abutment system comprises, said plastic element, as well as a screw, engaging in the screwing with the plastic element, with the screwing of the screw authorising the suppression of the mounting play of the frame taken, on the one hand, interiorly by the hook engaging with the lower flange of the frame, and the abutment system of which the screw bears without play on the outside on the frame of the solar panel.

8. Device according to one of claims 1 to 7, wherein the mutually engaging structures of said guide system between said retaining element and said fixed support form a sliding connection between the two synthetic parts.

9. Device according to claim 8, wherein the mutually engaging structures forming the sliding connection of said guide system comprise a protruding portion under the body of the part forming said retaining element, and a complementary groove along the part forming said fixed support.

10. Device according to one of claims 1 to 9, having a system for locking the position of the mobile retaining element with respect to said fixed support, in several discrete adjusting positions, said system for locking comprising at least partially structures of said mobile retaining element and of said fixed support, distributed in the direction of said guide system, produced as a one-piece component with said parts forming said fixed support and said mobile retaining element.

11. Device according to claim 10, wherein the structures of said system for locking comprise a plurality of adjusting openings of said fixed support, distributed, more preferably regularly spaced, according to the adjusting direction, as well as at least one corresponding opening of said mobile retaining element intended to be placed facing with one of the openings of said fixed support which is most suited to the adjusting, a locking member, such as a pin being intended to pass through said facing openings in order to ensure the locking of the position.

12. Device according to claim 11, comprising a snap-fitting system, preferably reversible, configured to ensure the retaining of the locking member in the opening of said retaining element, of which the mutually engaging parts are distributed between the part of the retaining element and the locking member.

13. Device according to one of claims 1 to 12, wherein said mobile retaining element comprises an engagement portion such that said hook intended to engage with the frame of the solar panel when the two retaining elements are separated, as well as a protruding portion of said engagement portion in the form of a pull tab or equivalent, intended for the grasping, intended to extend substantially parallel to the solar panel, outwards of said solar panel, and in such a way as to exit outwards.

14. Device according to one of claims 1 to 13, wherein said fixed support comprises a fitting groove, located underneath the body of said fixed support, open downwards, lengthwise according to a direction orthogonal to the adjusting direction and able to allow for the attaching of said fixed support, to a complementary rib intended to be threaded into said fitting groove.

15. Device according to claim 14, provided with a blocking member, intended to be inserted, through an upper opening of said fixed support, once the rib

is threaded into the fitting groove, and in such a way as to form a physical abutment for an end of the attaching rib and prohibit the withdrawal thereof.

16. Device according to claim 15, wherein the blocking member is a plastic part, with the retaining of the blocking member in the opening of said fixed support being provided thanks to means of snap-fitting distributed between said blocking member and said fixed support.

17. Device according to one of claims 1 to 16, comprising two independent assemblies, each comprising a fixed support and said mobile retaining element, the mobile retaining elements of two assemblies being intended to engage with two opposing parts of said solar panel, in particular two parallel flanges of the frame of the solar panel.

18. Device according to one of claims 1 to 17, wherein said part forming said mobile retaining element, as well as said part forming said fixed support are injection-moulded plastic parts.

19. Device according to claim 18, wherein the plastic part forming said mobile retaining element and/or the plastic part forming said fixed support have a reinforcing rib.

20. Method for manufacturing a device according to one of claims 1 to 19, wherein said mobile retaining element is obtained, as well as said fixed support, respectively, by injection moulding of a synthetic material, the structures of the guide system, where applicable the structures of the system for locking being obtained during the moulding of the two plastic parts.

21. Assembly comprising a solar panel retained by a device for attaching a solar panel according to one of claims 1 to 19 comprising at least two retaining elements, retaining said panel by engaging with two opposing parts of the solar panel, at least one of the retaining elements being movable in a direction defined by a guide system and in such a way as to allow an adjustment of the

spacing between the two retaining elements said assembly comprising said fixed support and said mobile retaining element, said mobile retaining element, and said fixed support consisting respectively of two synthetic parts, the guide system being produced by mutually engaging structures between said mobile retaining element, and said fixed support produced as a one-piece component with said parts forming said fixed support and said mobile retaining element.

22. Assembly according to claim 21, wherein one of the at least two retaining elements provides the retaining of said solar panel, at one of the two opposing parts of the solar panel, in a fixed position with respect to the support whereon are fixed the two retaining elements and the possible fixed support thereof, while the other retaining element providing the retaining by engaging with the other opposing part of the panel, is left mobile with respect to said corresponding fixed support, in the direction, and in such a way as to authorise the sliding of said mobile retaining element along said corresponding fixed support, in the case of heterogeneous expansions between the solar panel and the support whereon are fixed the two retaining elements and their fixed support.

23. Assembly according to claim 22, wherein the support providing an inclination of the solar panel in relation to the horizontal, for example by an angle α between 10° and 30°, said retaining element retaining the part of the solar panel, in the upper portion of the solar panel, in a fixed position with respect to the support, is that of the device in accordance with claim 4 of which the hook is turned outwards and in such a way as to engage with a lower flange of the frame of the solar panel, with the force of gravity on the solar panel naturally retaining the flange engaged with the hook of said retaining element, while said retaining element left mobile in the direction is located in the lower portion of the solar panel.