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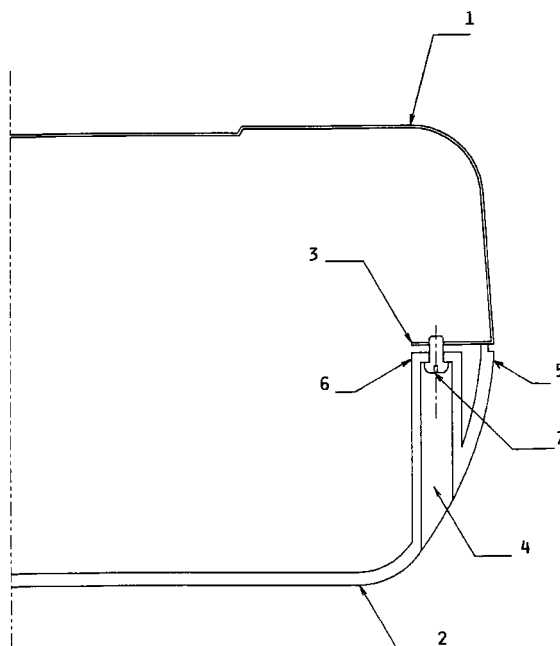
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(54) **Casing for a steam generator for electrical household appliances**

(57) Casing adapted in particular as a housing for steam generators for use in conjunction with electrical household appliances, such as steam cleaning appliances, clothes irons either of the simple or the automatic-refill type, fan-assisted ironing boards with refill function, coffee and similar brewing machines. The casing comprises two half-shells, ie. an upper one (1) and a lower one (2), in which the upper half-shell (1) is made of metal and the lower half-shell (2) is made of plastics. The borders (3, 5) of the half-shells are joined together by means of screws (7). The border (3) of the upper half-shell (1) is bent inwards, ie. towards the interior of the casing, and the border (5) of the lower half-shell (2) is so shaped as to feature a series of recessing receptacles (4) for the insertion of the screws (7) needed for joining the half-shells together.

The solution is effective in both technically and aesthetically improve the assembly of the two half-shells, while increasing the strength and solidity of the casing and reducing the number of component parts and the assembly time of the same casing.



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Description

[0001] The present invention refers to the construction of a casing adapted in particular to be used as a housing for steam generators for use in conjunction with electrical household appliances, such as clothes irons, either of the simple or the automatic-refill type, steam cleaning appliances and the like.

[0002] Casings are known in the art which are constituted by two half-shells, ie. an upper one and a lower one, in which the upper half-shell is made of metal and the lower one of either plastics or metal. The junction of the two half-shells along their mating borders is usually carried out by means of self-locking screws under interposition of a perimetrical gasket between said borders. To this purpose, the borders of the two half-shells must be appropriately shaped.

[0003] However, these prior-art casings of the above cited kind have a number of practical drawbacks.

[0004] In the first place, the border of the metal half-shell may be sharp-edged and, therefore, dangerous for the user; as a consequence, the contour of the junction of the half-shells must be always protected by means of a rubber or plastic profile section, wherein the latter also serves the purpose of improving the appearance, ie. the aesthetical merit of the junction, in that it conceals both the substantially untrimmed borders of the half-shells and the gasket arranged therebetween.

[0005] Moreover, the assembly of the perimetrical screws that fasten the half-shells together is quite awkward to carry out, since the borders thereof must be as narrow as possible.

[0006] It therefore is a main purpose of the present invention to do away with the drawbacks that are typically associated with prior-art casings, ie. improve both technically and aesthetically the junction of the half-shells, thereby increasing the overall strength and solidity, as well as reducing both the number of component parts and the assembly time needed to complete such casings.

[0007] According to the present invention, such an aim is reached in a casing of the above cited kind featuring the characteristics as recited in the appended claim 1 and the following sub-claims.

[0008] Features and advantages of the present invention will be more readily understood from the description that is given below by way of non-limiting example with reference to the accompanying drawing.

[0009] The Figure is a partial vertical-section view of the casing, in which both the upper half-shell 1 and the lower half-shell 2 can be clearly noticed.

[0010] The upper half-shell is of metal and the border 3 thereof is bent inwards, ie. towards the interior of the casing, along its whole periphery. Such a bending of the border 3 must have an angle of at least 60° with respect to the vertical in order to allow for a correct joining with the mating border of the lower half-shell 2. In a preferred manner, the border 3 of the upper half-shell 1

is bent by an angle of 90° with respect to the vertical and is therefore horizontal.

[0011] The lower half-shell 2 features a profile that is shaped so as to show a series of recessing receptacles 4 (only one of which is shown in the Figure) provided in a regularly spaced sequence along the border 5 of the half-shell 2. Said recesses 4 are open downwards and the upper extremity 6 thereof is bored to let in a screw 7 that fastens together the border 3 of the upper half-shell and the border 5 of the lower half-shell. To this purpose, the border 3 of the upper half-shell is provided with holes that correspond to the holes of the recesses 4 in the border 5 of the lower half-shell. Furthermore, the bent border 3 of the upper half-shell and the upper extremity 6 of the recesses 4 are arranged on parallel and mating planes so as to ensure the best possible junction of the two half-shells together, preferably under interposition of a sealing gasket therebetween (not shown in the Figure).

[0012] The casing according to the present invention is therefore fully effective in reaching the proposed aims; in particular it enables

- the outer peripheral profile section, which was required in prior-art solutions to cover the junction between the two half-shells, to be eliminated;
- the time required to assembly the casing to be reduced, thanks to said elimination of said junction-covering profile section;
- outer, ie. accessible metal edges, which might prove dangerous for the user, to be eliminated;
- the screws used to fasten the two half-shells together to be inserted in appropriate protective receptacles;
- the structure of the whole casing to be strengthened thanks to the border of the metal half-shell being bent.

[0013] It will of course be appreciated that the contours of the joining borders of the half-shells (1, 2) can be variously modified without departing from the scope of the present invention, so as recited in the last sub-claims.

Claims

1. Casing adapted in particular to be used as a housing for steam generators for use in conjunction with electrical household appliances, such as steam cleaning appliances, clothes irons either of the simple or the automatic-refill type, fan-assisted ironing boards with refill function, coffee and similar brewing machines, comprising two half-shells, ie. an upper one (1) and a lower one (2), in which the

upper half-shell (1) is made of metal and the lower half-shell (2) is made of plastics, the borders (3, 5) of the half-shells being joined together by means of screws (7), **characterized in that** the border (3) of the upper half-shell (1) is bent inwards, ie. towards the interior of the casing, and the border (5) of the lower half-shell (2) is so shaped as to feature a series of recessing receptacles (4) for the insertion of the screws (7) needed for joining the half-shells together.

2. Casing according to claim 1, **characterized in that** the bent border (3) of the upper half-shell (1) and the bottom (6) of the recesses (4) provided in the border (5) of the lower half-shell (2) are on respective parallel planes.
3. Casing according to claim 1 or 2, **characterized in that** the border (3) of the upper half-shell (1) is bent by an angle of at least 60° with respect to the vertical, and the recesses (4) provided along the border (5) of the lower half-shell (2) are open downwards.
4. Casing according to any of the claims 1 to 3, **characterized in that** the border (3) of the upper half-shell (1) is bent by an angle of 90° with respect to the vertical.

