Claims

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1.- Folded panel, wherein the folded panel (1) comprises a front side (2), a rear side (3), a first panel part (1a), a second panel part (1b) and a bent transition section (7);

wherein the first panel part (1a) and the second panel part (1b) are connected to each other at the front side of the folded panel via the bent transition section (7) and form a single entity;
wherein the space between the first panel part (1a), the second panel part (1b) and the bent transition section (7) comprises an insert (8),
wherein the bent transition section (7) is bent over the insert,
wherein the insert is at least attached to one or more of the first panel part (1a), the second panel part (1b) or the bent transition section (7).

2.- Folded panel as in claim 1, wherein the insert (8) has an end face (26) with a shape which is such that that the transition section (7) bears against the end face (26).

3.- Folded panel as in claim 2, characterized in that the insert (8) has a shape such that the outer sides (27) of the insert (8) which lie on both sides of the end face (26) lie against opposite side walls (29) of the first panel part (1a) and the second panel part (1b).

4.- Folded panel as in claim1, wherein the folded panel (1) comprises a substrate (10) and a top layer (12), wherein the top layer (12) comprises a decor layer (14), wherein the bent transition section (7) comprises at least the top layer (12); wherein the decor layer (14) comprises a printed paper layer which is impregnated with a thermosetting resin.

5.- Folded panel as in claim 1, wherein the first panel part (1a) and the second panel part (1b) comprise a substrate (10), wherein the substrate is wood-based.

6.- Folded panel as in claim 1, chwherein the first panel part (1a) and the second panel part (1b) comprise a substrate (10), wherein the substrate comprises a wood fiberboard with a density of more than 750 kg/m^3.

7.- Folded panel as in claim 1 wherein the insert (8) comprises a component made of wood fibers bonded with resin or adhesive or consists thereof.

8.- Folded panel as in claim 1 wherein the insert (8) comprises a component made of wood fibers bonded with resin or adhesive or consists thereof, wherein the wood fibers in the component are, on average, parallel with the front side of the first panel part (1a) and/or the second panel part (1b).

9.- Folded panel as in claim 7 wherein the insert (8) is made of a wood fiberboard, wherein the chord of the component of the insert (8) which determines the chord of the bent transition section (7) is perpendicular to the plane of the wood fiberboard from which the insert (8) is made.

10.- Folded panel as in claim 1 wherein the insert (8) comprises a projection (21), wherein the projection (21) is introduced in an opening (23) which is provided for the purpose on the rear side (3) of the first panel part (1a), wherein the projection is clamped, tensioned and/or glued in the opening of the first panel part (1a) provided for the purpose.

11.- Folded panel as in claim 10 wherein the projection (21) extends along the entire length of the insert (8) and/or in that the projection (21) has the same cross section along its entire length.

12.- Folded panel as in claim 1 wherein the first panel part (1a) or the second panel part (1b) is provided, on the edge opposite the bent transition section (7), with a coupling part in the form of a groove (40) delimited by a front lip (41) and a rear lip (42), wherein the rear lip projects further with respect to the edge of this panel part

than the front lip, wherein the rear lip comprises a locking part (43) facing the groove;

wherein the coupling part is configured to produce a coupling with a panel which comprises a tongue (44) on its edge and a recess (46) on the rear side of the tongue (44);

wherein, in the coupled state of the tongue in the groove, this tongue and groove produce a locking in the direction perpendicular to the plane of the panel coupled to the respective panel part, and wherein the locking part and the recess produce the locking in the direction perpendicular to the coupled edges and in the plane of the panel.

13.- Folded panel as in claim 1 wherein the bent transition section forms a round nosing in the folded panel.

14.- Folded panel as in any claim 1 wherein the bent transition section (7) comprises a rib (50), wherein the rib is formed by a local thickening in the bent transition section (7), wherein the insert (8) comprises a slot (51), wherein the rib is introduced in the slot, wherein the rib and the slot have dimensions which are such that the rib fits precisely in the slot or wherein the rib tapers.

15.- Folded panel as in claim 1 wherein the bent transition section (7) comprises a slot, wherein the slot is formed by a local thinning in the bent transition section (7), wherein the insert (8) comprises a rib, wherein the rib is introduced in the slot, wherein the rib and the slot have dimensions which are such that the rib fits precisely in the slot or wherein the rib tapers.

16.- Folded panel as in claim1 wherein the first panel part (1a) is thinner than the second panel part (1b) the lateral end (65) of the folded panel on the side which comprises the first panel part (1a) is partly formed by the insert (8).

17.- Folded panel as in claim 1 wherein the folded panel (1) comprises a substrate (10) and a top layer (12), wherein the top layer (12) comprises a decor layer (14),

wherein the bent transition section (7) comprises at least the top layer (12) and a layer of the substrate, wherein the first panel part (1a) comprises at least the top layer (12) and a layer of the substrate (10).

18.- Method for producing a folded panel (1) as in any of the preceding claims 1 - 55, characterized in that the method comprises the steps

- providing a panel, wherein the panel comprises a front side (2), a rear side (3), a first panel part (1a), a second panel part (1b) and a transition section (37); wherein the first panel part (1a) and the second panel part (1b) preferably have the same thickness; wherein the first panel part (1a) and the second panel part (1b) are connected to each other at the front side of the panel via the transition section (37) and form a single entity;
- attaching an insert (8) to the first panel part (1a), for example by means of adhesive and/or by means of a mechanical connection;
- bending the transition section (37) over the insert (8) so that a bent transition section (7) is obtained between the first panel part (1a) and the second panel part (1b); and
- attaching the insert (8) to the second panel part (1b) and/or to the bent transition section (7).

19.- Method for producing a folded panel (1) as in any of the preceding claims 1 - 17, characterized in that the method comprises the steps

- providing a panel, wherein the panel comprises a front side (2), a rear side (3), a first panel part (1a), a second panel part (1b) and a transition section (37); wherein the first panel part (1a) and the second panel part (1b) preferably have the same thickness; wherein the first panel part (1a) and the second panel part (1b) are connected to each other at the front side of the panel via the transition section (37) and form a single entity;
- pushing an insert (8) in the direction perpendicular to the panel, wherein the insert (8) makes contact with the transition section (37) during the pushing operation and wherein the transition section is bent to form a bent transition section (7) as a result of this pushing operation, wherein both the first panel part (1a) and the second panel part (1b) perform an angular rotation with respect to the insert (8); and

- attaching the insert (8) to one or to both of the first panel part (1a) or the second panel part (1b) and/or to the bent transition section (7).

20.- Method as in claim 19, characterized in that, when pushing the insert (8), the transition section (37) is pushed into a mold (67) which, together with the form of the insert (8), determines the form of the bent transition section (7).

21.- Method as in claim 19, characterized in that pushing is performed by means of a tool, wherein the tool engages in one or more open recesses (15) – e.g. in the form of the negative of a dovetail – or protruding parts which are situated in the open space between the first panel part and the second panel part in the folded panel.

22.- Method as in claim 19, characterized in that the transition section (37) comprises a rib (50), wherein the rib is formed by a local thickening in the bent transition section (37), wherein the insert (8) comprises a slot (51), wherein the rib is introduced in the slot during the pushing operation, preferably wherein the rib and the slot have dimensions which are such that the rib fits precisely in the slot and/or preferably wherein the rib (50) tapers.