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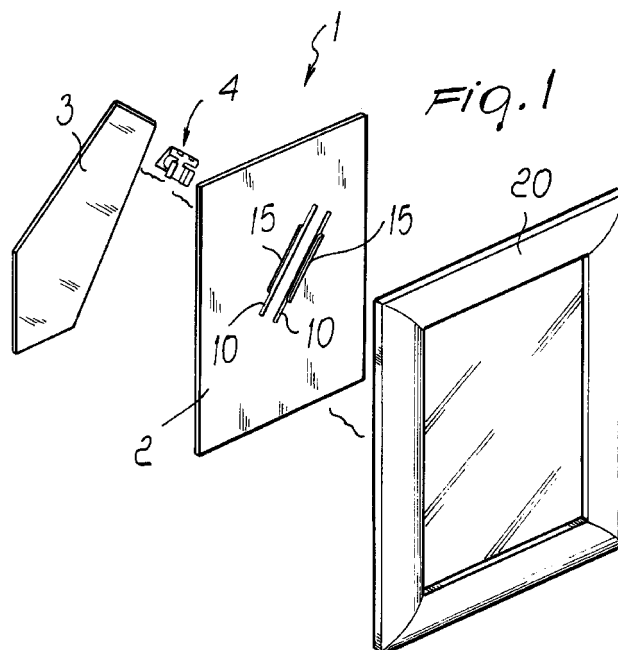
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(54) **Back for picture frames and the like with means for adapting to different sizes**

(57) A back (1) for picture frames and the like with elements for adapting to different sizes, comprising a back body (2) to which a supporting leg (3) is connected by hinge means (4), the back further comprising elements (10) for continuous sliding in order to vary without discontinuity the placement of said hinge means (4) with respect to said back body (2).



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Description

[0001] The present invention relates to a back for picture frames and the like with means for adapting to different sizes.

[0002] It is known that picture frames and the like are generally provided by means of a frame-like portion which surrounds the glass plate behind which the back is arranged; the back is usually provided with a pivoting supporting leg which allows to arrange the picture frame vertically or horizontally.

[0003] In the solutions of the prior art, when the width of the frame varies it is necessary to change the length of the supporting leg so that the resting inclination of the frame is always the same.

[0004] This fact entails the need to provide various kinds of back according to the contingent dimensions of the frames.

[0005] This problem has been partly solved up to now for low-cost picture frames in which the back and the supporting leg are made of plastics and the hinge element is provided by means of pins which protrude laterally from the supporting leg; solutions have already been provided, in these versions, which have various seats for the pins that form the hinge, thus allowing to vary, by discrete steps, the useful length of the supporting leg, at least partially compensating for the different size of the frames.

[0006] This solution allows discrete placements and can be used only for plastic backs, i.e., backs of relatively low quality.

[0007] Other known solutions have been introduced in frames in which the supporting leg is made of cardboard or the like and in which the hinge means are provided by deforming the material; in these solutions, slots have already been provided on the supporting leg, allowing to vary its useful length.

[0008] However, also these solutions can be used only with a particular type of material, i.e., materials that allow to provide the means for mutually hinging the supporting leg and the back by localized deformation of the material itself.

[0009] The aim of the present invention is to solve the above-cited problem by providing a back for picture frames and the like with means for adapting to different sizes which allows to use the same back on a very wide range of frames having different thicknesses, achieving optimum and precise positioning in each case.

[0010] Within the scope of this aim, a particular object of the present invention is to provide a back for picture frames and the like in which the supporting leg can be positioned with respect to the back body very quickly and easily without performing complicated maneuvers and also having the assurance of considerable positioning stability.

[0011] Another object of the present invention is to provide a back which, by virtue of its particular constructive characteristics, is capable of giving the greatest

assurances of reliability and safety in use.

[0012] Another object of the present invention is to provide a back for picture frames and the like which can be easily obtained starting from commonly commercially available elements and materials and is furthermore competitive from a purely economic point of view.

[0013] This aim, these objects and others which will become apparent hereinafter are achieved by a back for picture frames and the like with means for adapting to different sizes, comprising a back body to which a supporting leg is connected by way of hinge means, characterized in that it comprises means for continuous sliding in order to vary without discontinuity the placement of said hinge means with respect to said back body.

[0014] Further characteristics and advantages of the present invention will become apparent from the following detailed description of a preferred but not exclusive embodiment of a back for picture frames and the like with means for adapting to different sizes, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a schematic exploded perspective view of a picture frame;

Figure 2 is a perspective view of the hinge means; Figure 3 is a sectional view, taken along the plane III-III of Figure 4;

Figures 4 and 5 are schematic views of the application of the same back to two frames having different sizes.

[0015] With reference to the above figures, the back for picture frames and the like with means for adapting to different sizes, according to the invention, generally designated by the reference numeral 1, comprises a back body 2 which is made of any material deemed appropriate and is constituted in practice by a substantially plate-like element.

[0016] A supporting leg 3 is pivoted to the back body 2; said leg has a conventional shape, with a resting end which forms two mutually perpendicular edges, and is connected by hinge means generally designated by the reference numeral 4.

[0017] The particularity of the invention is constituted by the fact that on the back body 2 there are provided means for continuous sliding in order to vary without discontinuity the position of the hinge means 4 with respect to the back body. The sliding means are provided by means of at least one slot 10.

[0018] In a preferred embodiment, the continuous sliding means are provided by means of two slots 10 which are substantially parallel to the diagonal of the back and in which flaps 11, provided on one of the elements of the hinge 4, can be slideably accommodated.

[0019] In greater detail, the flaps 11 protrude from a connecting portion 12 which enters the slots and protrudes from the base body 13 of the hinge, which is pivoted to the other hinge element 14 which is rigidly

coupled to the leg 3.

[0020] The flaps 11 tuck, outside the slots 10, into recesses 15 which lie laterally adjacent to the slots, thus providing a stable coupling with a friction coefficient which ensures stable positioning in the slots.

[0021] As shown in Figure 4, the sliding of the hinge means 4 in the slots 10 allows to place the supporting leg 3 according to the size of the frames, designated by the reference numeral 20, so as to always have optimum support characteristics.

[0022] From the above description it is thus evident that the invention achieves the intended aim and objects, and in particular the fact is stressed that a back is provided in which continuity in the mutual positioning of the supporting leg and the back is ensured, with the advantage of being able to adapt to any frame size while having at all times an element which is stable from the mechanical point of view and has a high degree of aesthetic finish.

[0023] The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the inventive concept.

[0024] All the details may further be replaced with other technically equivalent elements.

[0025] In practice, the materials employed, as well as the contingent shapes and the dimensions, may be any according to requirements.

[0026] The disclosures in Italian Patent Application No. MI98A002021 from which this application claims priority are incorporated herein by reference.

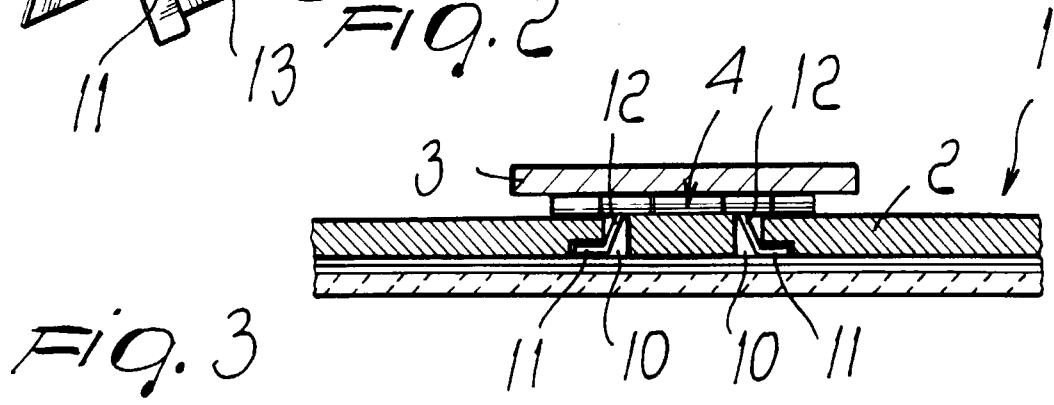
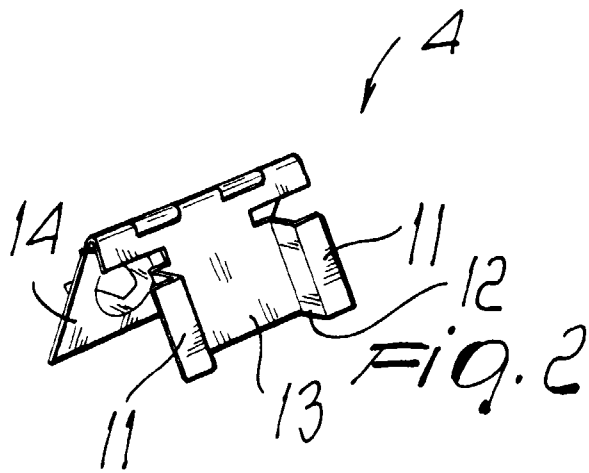
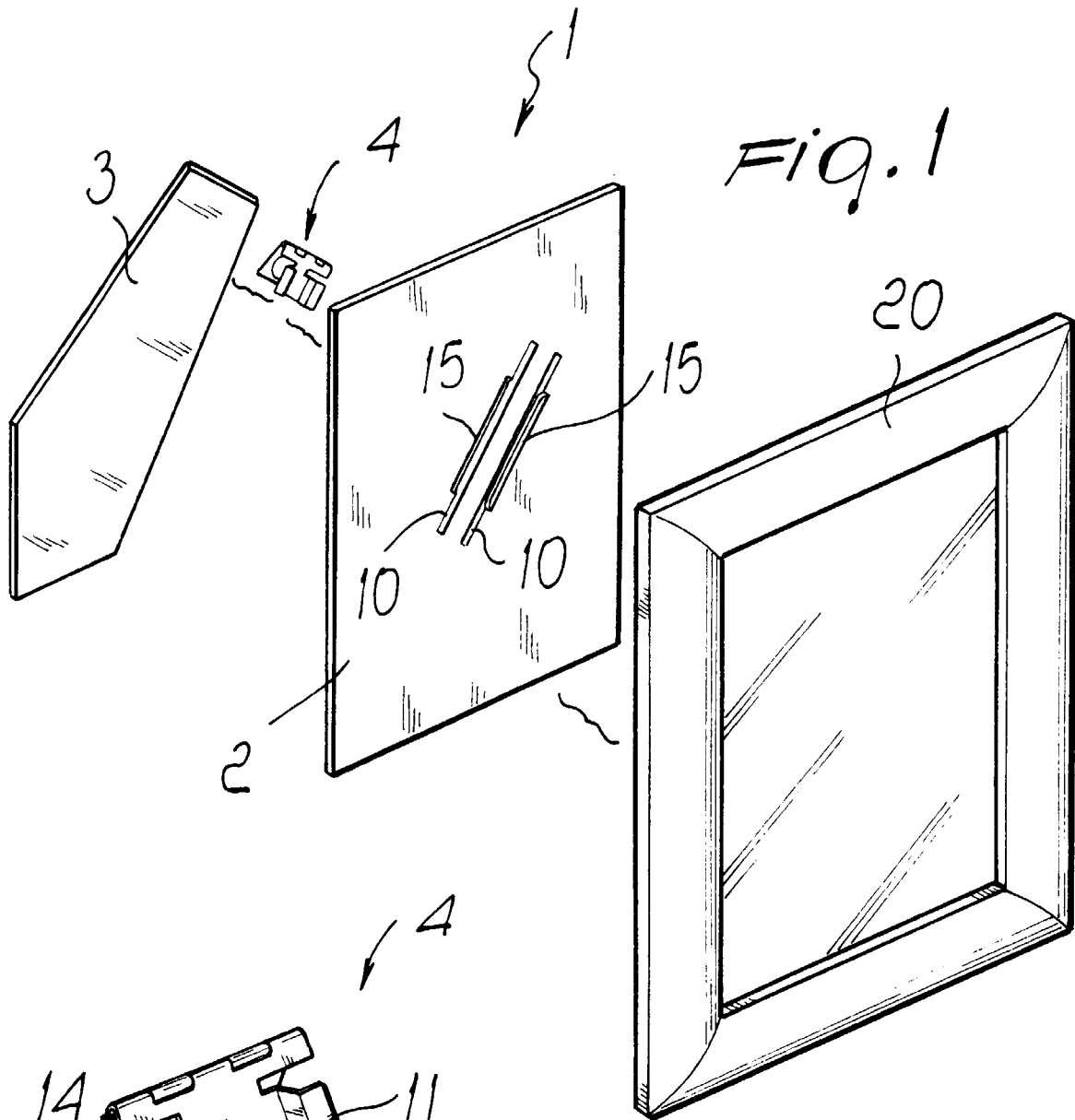
[0027] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A back for picture frames and the like with means for adapting to different sizes, comprising a back body to which a supporting leg is connected by hinge means, characterized in that it comprises means for continuous sliding in order to vary without discontinuity the placement of said hinge means with respect to said back body.
2. The back according to claim 1, characterized in that said continuous sliding means are provided by at least one slot provided in said back body in a direction which is substantially parallel to the diagonal of said back body.
3. The back according to claim 2, characterized in that said hinge means is constituted by two joined elements, said slot accommodating one of the elements of said hinge means, the other element

being connected to said supporting leg.

4. The back according to claim 1, characterized in that it comprises two mutually parallel slots.
5. The back according to claim 3, characterized in that said element of the hinge means which is accommodated in said slot has flaps which are tucked into said back body.
6. The back according to claim 5, characterized in that said flaps are connected to coupling portions which protrude from a base body of said hinge element.
7. The back according to claim 4, characterized in that it comprises recesses which are laterally adjacent to said slots in order to accommodate said flaps.



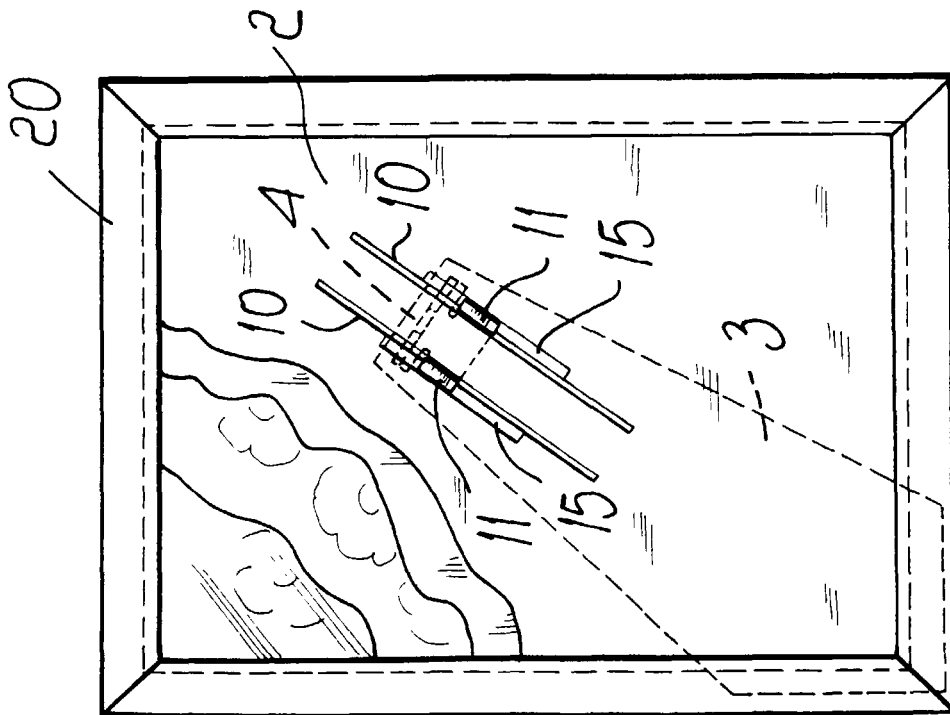
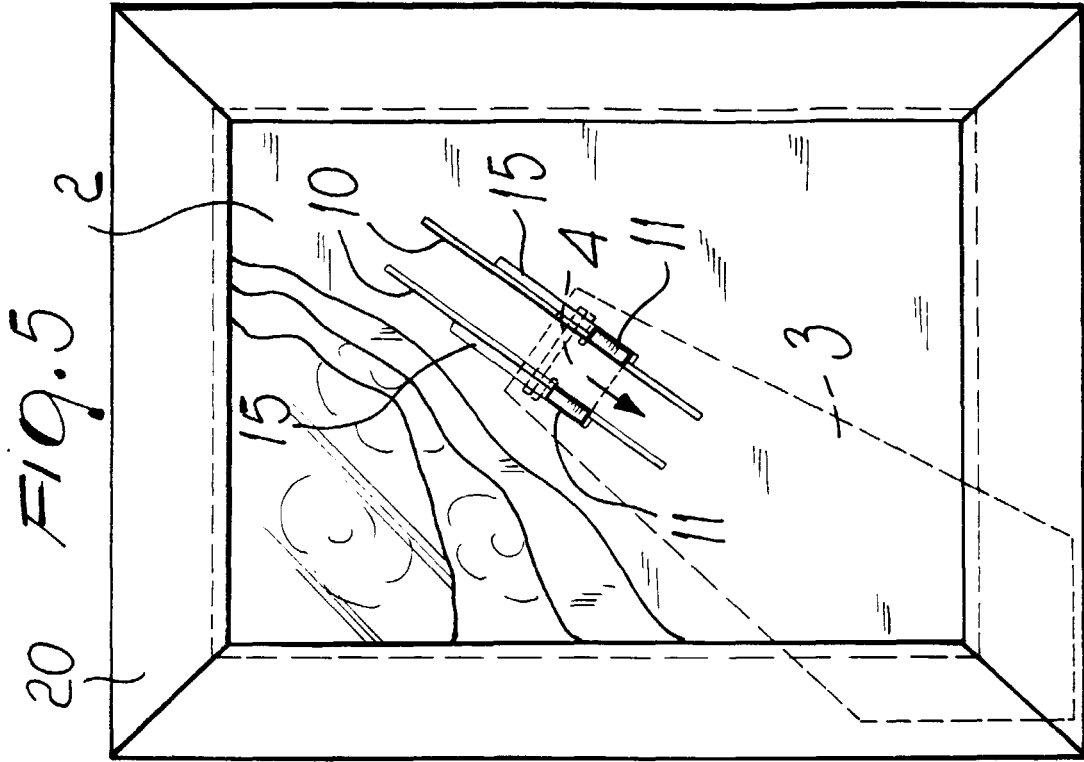


FIG. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 99 11 7495

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|--|---|--|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| X | GB 2 279 248 A (WHATFORD) 4 January 1995 (1995-01-04) * figures A2,B2 * | 1-3 | A47G1/14 |
| X | FR 2 615 718 A (FLEXOR) 2 December 1988 (1988-12-02) * figures * | 1,2,4 | |
| A | US 2 542 958 A (BABBITT) 20 February 1951 (1951-02-20) * column 1, line 39; figures * | 1,3-7 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.7) |
| | | | A47G |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 22 December 1999 | Examiner Beugeling, G.L.H. |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p> | | | |

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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22-12-1999

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| GB 2279248 | A | 04-01-1995 | NONE | |
| FR 2615718 | A | 02-12-1988 | NONE | |
| US 2542958 | A | 20-02-1951 | NONE | |