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Europäisches Patentamt  
European Patent Office  
Office européen des brevets

11 Publication number:

0 248 360  
A2

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# EUROPEAN PATENT APPLICATION

21 Application number: 87107796.2

51 Int. Cl.4: G09F 15/02

22 Date of filing: 29.05.87

30 Priority: 04.06.86 FI 862372

43 Date of publication of application:  
09.12.87 Bulletin 87/50

84 Designated Contracting States:  
BE DE FR GB NL SE

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54 Poster paper.

57 Poster paper (I) intended to be fixed by means of adhesive substance onto a surface for advertisements, announcements or the like information comprises a fibrous layer (2), on the front side thereof a surface (3) for figure and on the back side thereof a surface (4) for adhesive substance. The fibrous layer comprises a top layer (2a) and a bottom layer (2b), which are releasably attached to each other so, that the paper can be peeled in the direction of its plane along the boundary surface (7) situated between the top layer and the bottom layer, when a new poster sheet is fixed onto the old one.

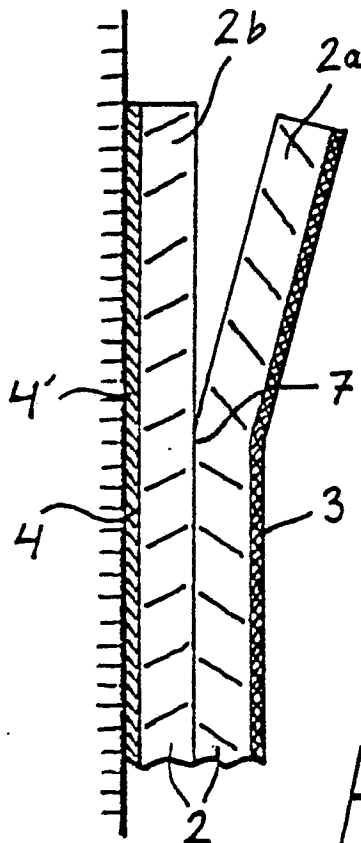


Fig. 2

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## Poster paper

The invention relates to poster paper, which is presented by the preamble portion of the claim 1.

Today poster papers are known, which are intended for posters containing advertisements, announcements or the like and which are fixed to appropriate sites by means of an adhesive substance. Different fixing sites are e.g. various wall surfaces, both outdoors and indoors, advertising columns and hoardings intended particularly for posters. The construction of the poster papers nowadays in use is such, that difficulties arise, when old poster sheets are replaced with new ones. Because the poster paper is fixed on the surface with an adhesive, there will be difficulties in removing it and in this case fixing of a new poster sheet directly onto the old one is the only satisfactory solution. The surface of the older poster paper may in this case cause difficulties in fixing. Moreover, if the old poster paper has a figure having various intensive colours and the new poster paper is thin and has poor opacity, the figure on the old poster paper will be visible through the new paper in a striking way. This all results in a mottled appearance of a surface containing advertisements and different posters and the desired effect of the original design is not achieved with the external appearance of the advertisements.

The poster paper according to the invention eliminates the aforementioned drawbacks completely. For gaining this purpose the poster paper according to the invention is mainly characterized in what is presented by the characterizing portion of the claim 1. As the fibrous layer between the front side figure surface and the back side glue surface in a poster paper comprises two layers, which are detachable from each other, a new poster sheet can be fixed easily and shiftily by detaching the layers in the old sheet from each other and by gluing the new paper onto the lowest layer of the old sheet, which remains fixed on the surface. The old figure will in this case not be disturbing the external appearance of the new poster sheet. The adhesion ability of the new poster sheet will also be improved.

According to a preferred embodiment, the bottom layer lower in the fibrous layer is made mainly of mechanical pulp and the top layer upper in the construction is mainly constituted of chemical pulp as raw material. This optimizes the costs in manufacture.

The invention is described in the following in more detail with reference to the accompanying drawing, wherein

Fig. 1 is a schematic side view of a poster paper of the invention fixed on the surface,

Fig. 2 shows the separation of the layers from each other in the poster paper of Fig. 1 on fixing the new paper and

Fig. 3 shows a new poster paper of the invention fixed in the place of the old one.

Fig. 1 shows the poster paper 1 of the invention, fixed on a appropriate surface and seen in a direction perpendicular of the plane thereof. The front side of the paper comprises a surface 3 for the figure. This surface can be constituted of a coating suitable for printing. The back side of the paper comprises a surface 4 for gluing, onto which an adhesive layer 4' is formed when the paper is fixed. Between the said surfaces there is a fibrous layer 2 giving strenght to the poster paper. The fibrous layer comprises a top layer 2a on the side of the figure surface 3 as well as a bottom layer 2b on the side of the surface 4 for gluing. The back surface of the bottom layer 2b forms the aforementioned surface 4 for adhesive substance. The layers are attached to each other along a boundary surface 7 between the layers.

When an old poster or the like is replaced with a new one, the procedure is as shown in Fig. 2. The poster paper containing the old advertisement or the like is peeled in the direction of its plane along the boundary surface 7 between the layers 2a and 2b e.g. manually. Only the adhesive layer 4' and the bottom layer 2b of the old poster remain stuck on the surface whereas the top layer 2a containing the old figure is removed. Onto this bottom layer, the new poster paper containing a new advertisement or the like can be attached likewise by gluing. The new poster paper can also have the structure of the poster paper of the invention, as shown by Fig. 3. When this new advertisement is removed later, similar procedure as described hereinabove can be applied.

The top layer 2a and the bottom layer 2b can each contain mainly one or several types of fibres, such as mechanical ground wood pulp, refined mechanical pulp, chemical pulp or synthetic fibres as well as raw materials generally used in pulp, such as fillers, sizing agents and additives. Both layers can have a totally similar composition or their compositions can differ e.g. so, that the top layer 2a is mainly constituted of chemical pulp, i.e. of wood pulp manufactured in chemical process, and the bottom layer 2b is mainly constituted of ground wood pulp or of other mechanically manufactured pulp. The last mentioned alternative has the advantage, that raw material of higher quality can be used in forming the surface layer important for the external appearance of the poster, while a cheaper material can be used in the bottom layer,

which lies between the surface layer and the adhesive surface and whose purpose is to make the peeling of the fibrous layer of the paper possible and to act as an new surface for fixing a new poster paper.

The separate layers 2a and 2b of the fibrous layer 2 can in practice be manufactured so, that in the manufacturing process two paper webs are brought together in a wet state, but in a state, where they have a sufficiently high dry substance content. In this case the layers become bonded together strongly enough and the construction of the poster paper becomes firm enough for the use in practice. The bond so formed at the boundary surface 7 between the two layers is, however, weak enough so that the poster paper can later be peeled along this boundary surface. When the poster paper is manufactured in above mentioned way, no particular separating layer between the layers 2a and 2b is needed.

The optimum range within which the dry substance content of the joined paper webs must lie in the joining stage is dependent of many factors, such as the type of the layers and the raw materials therein as well as of the drying rate of the paper. These all factors can mastered by a man skilled in the art for obtaining the optimal result. It can be mentioned as a general rule, that the dry substance content should be higher than 10% by weight in order to prevent the layers from becoming too adherent to each other.

The surface 3 for the figures can be formed onto the top layer 2a by a usual operation in a paper machine or in a separate operational stage. It can be composed of a coating containing e.g. some surface sizing agents, pigment coating, lacquer, plastic or the like, all known to man skilled in the art. The purpose of this coating is to enhance the forming of the figure containing the necessary information onto the poster paper surface. This can be done manually or by printing.

The grammages of the top layer 2a and the bottom layer 2b can each lie within a range of 20-200 g/m<sup>2</sup> and the grammage of the surface coating, dependent on its type, can be within a range of 1-150 g/m<sup>2</sup>. The top layer and the bottom layer do not necessarily have to be of equal thickness, but the bottom layer can for example be thinner, because its main purpose is to act as a layer which separates the top layer 2a and the figure surface 3 from the surface 4 intended for gluing.

The invention is by no means restricted to only those embodiments disclosed in the description, but it can be altered within the scope of the invention presented by the claims. The essential feature of the invention is, that the fibrous layer of the poster paper comprises two layers and the poster paper is peelable along the boundary surface be-

tween these layers on replacing the poster paper with a new one. The amount of different layers is by no means restricted, e.g. the surface coating on the top layer 2a is not always necessary, depending on the specific use. The fibrous layers 2 can also be constituted of more than two layers so, that it contains at least one boundary surface 7, along which the fibrous layers can be separated from each other.

## Claims

1. Poster paper (1) intended to be fixed by means of adhesive substance onto a surface for advertisements, announcements or the like information and comprising a fibrous layer (2), on the front side thereof a surface (3) for figure and on the back side thereof a surface (4) for adhesive substance, **characterized** in that the fibrous layer comprises a top layer (2a) and a bottom layer (2b), which are releasably attached to each other so, that the paper can be peeled in the direction of its plane along the boundary surface (7) situated between the top layer and the bottom layer.

2. Paper in accordance with claim 1, **characterized** in that the top layer (2a) is mainly constituted of chemical pulp and the bottom layer (2b) is mainly constituted of ground wood pulp or of other mechanically manufactured pulp.

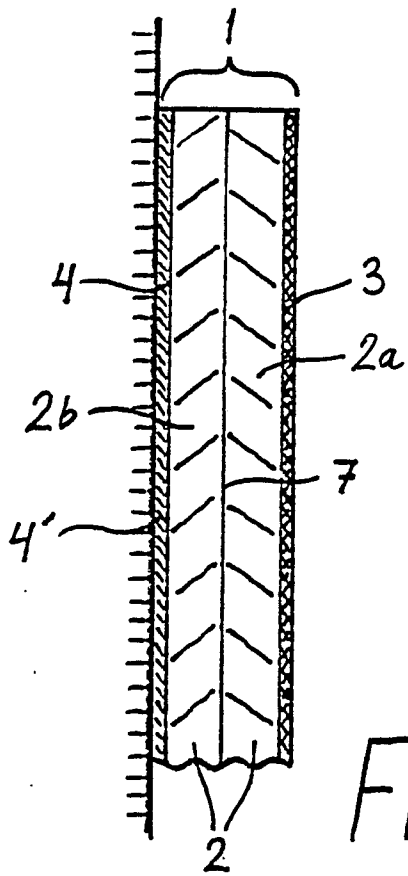


Fig. 1

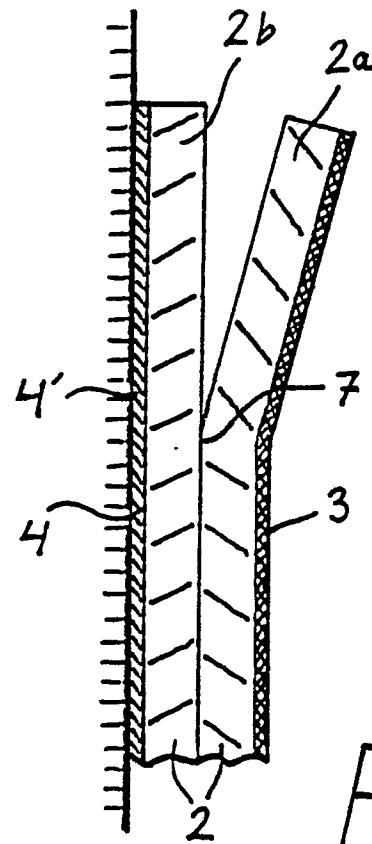


Fig. 2

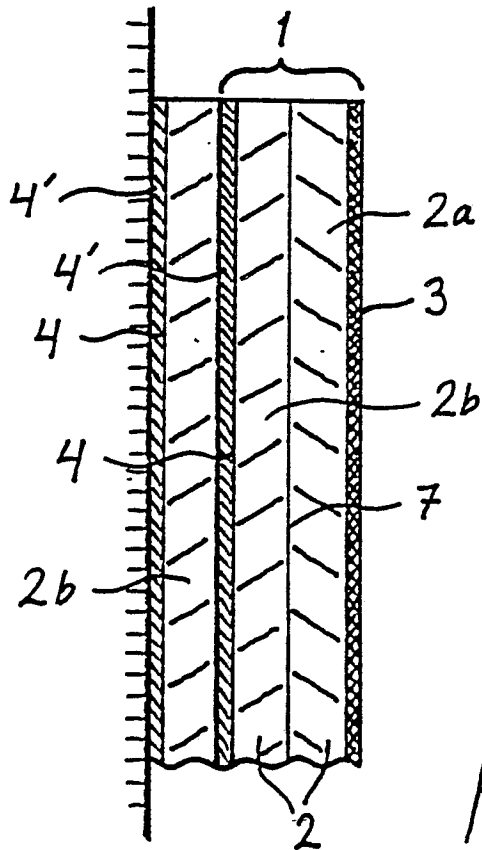


Fig. 3