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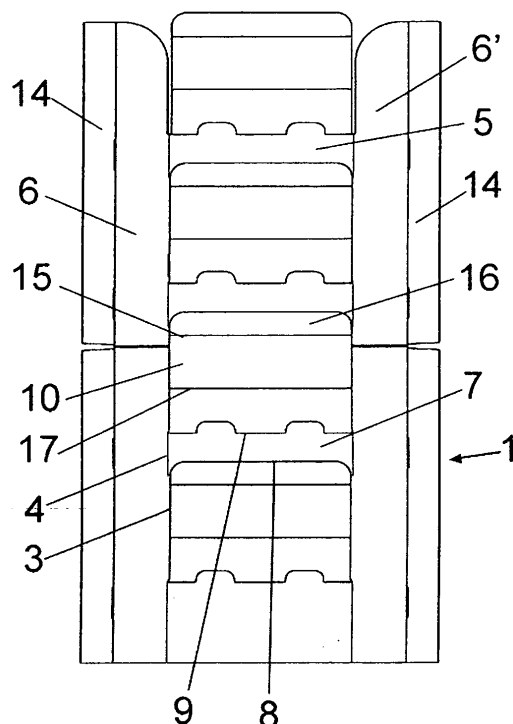
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(54) **Self-mountable display stand**

(57) The display stand of the invention features a minimum volumetric occupation in inoperative situation, with the special feature that it goes automatically from the collapsed situation to the assembled situation, without doing anything more than a slight initiating handling of said transformation effect. In order to do that, it is constituted by means of the combination of two laminar pieces (1 and 2), equipped with cutting and folding lines

(3-4-20-17), so that one and the other permit the folding of both pieces in order for each to configure U-sectioned channelled bodies, facing each other at their openings, the front piece having longitudinal and marginal flaps (14) for fastening by means of adhesive to the lateral areas or sections (13) of the rear piece, in order to configure a tubular body capable of adopting a flat or prismatic-rectangular disposition.

FIG. 1



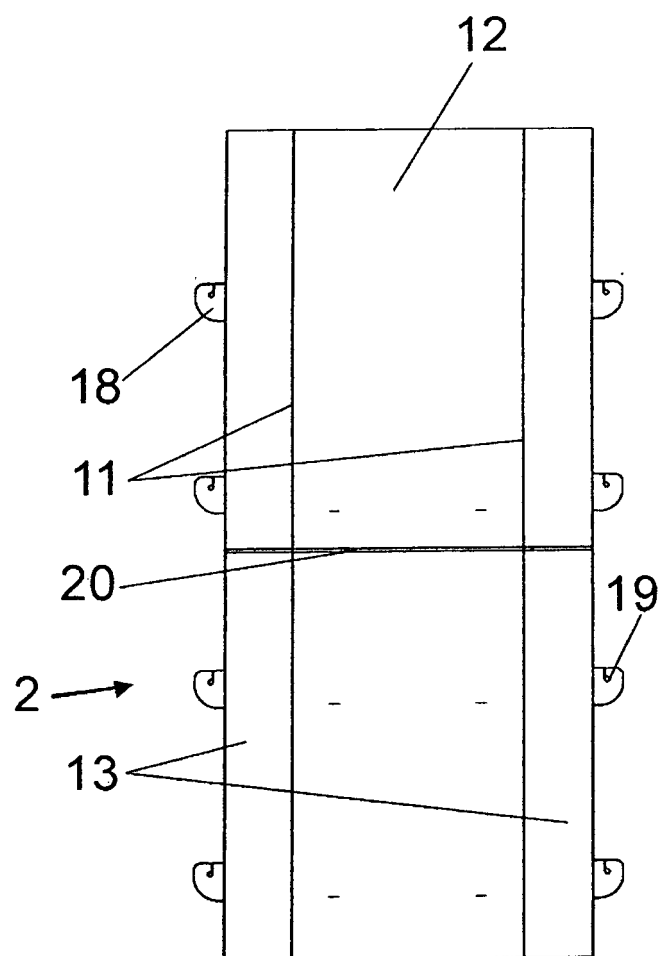


FIG. 2

Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a display stand, of the type which configures a kind of column or display with several compartments stacked one on top of another and opened frontally, specifically to a display stand produced based on corrugated cardboard.

[0002] The object of the invention is to achieve a simply structured, and consequently very economical, display stand, which is collapsible, so that in inoperative situations it is practically flat and its volumetric occupation is small, but with the special feature that it is also self-mountable, i.e. it goes automatically from the collapsed position to the assembled position, without anything more than a slight initiating handling of said transformation effect.

BACKGROUND OF THE INVENTION

[0003] Within the wide range of display stands known to date, variables both within its own structural conception and in the material wherefrom it is constituted, cardboard display stands are known, such as those which are closest to the object of the invention, wherein by means of a special configuration for the piece or pieces which constitute it, a type of column is achieved of greater or lesser height, suitably compartmentalized into different levels in order to constitute a display stand, but nevertheless these display stands suffer from a problem which is basically centred on the following aspects: either the display stand is not collapsible and not in the least self-mountable, so that its volumetric occupation in inoperative situation is quite large, which negatively results in storage and transportation costs, or the display stand is collapsible, in order to eliminate the aforementioned problem, in which case it requires relatively complicated assembly operations, which in many cases the user of the display stand is unwilling or unable to perform.

DESCRIPTION OF THE INVENTION

[0004] The self-mountable display stand proposed by the invention resolves the abovementioned problem in a completely satisfactory manner, combining the benefits of the conventionally assembled and assemblable display stands.

[0005] In order to do this, and more specifically, the display stand proposed is constituted by means of the functional combination of two pieces of corrugated cardboard or such like, of basically rectangular outline, and on each one are defined two longitudinal folding lines determining three sections, one central and wider, and two lateral and thinner, so that these two pieces are intended to join to each other at their lateral sections, configuring a lateral, cross-sectional rectangular body, elongated vertically, wherein the lateral sections of each one

of its two pieces form the walls, also lateral to the tubular body, while the middle sections of each piece configure the frontal face and the rear face of the aforementioned tubular body, which, in turn, constitutes the display case.

[0006] As a complement to the structure described in the frontal body, and more specifically in the intermediate section thereof, is established a longitudinal line of repetitive die-cutting, each one of which defines a frontal fixed slat, and a wide flap which bends backwards and finishes off in a second slat which, by means of adhesive, attaches to the piece constituting the rear wall of the tubular body. A folding line is situated in the middle area of the flap which permits the folding of said flap upon itself when the frontal face and the rear face of the display case come into contact with each other, i.e. in inoperative situation thereof.

[0007] In the folding line that connects the frontal slat with the foldable flap it has been provided that preferably there exist a pair of cutting lines, each one constituting emerging tabs of the frontal slat which function as retaining buffers for the objects located on the flap in extended situation thereof.

[0008] In order for the self-mountable display stand to be constructed practically instantaneously, it is provided that the rear piece incorporates on its longitudinal vertical edges a plurality of small perforated tabs, with those on one edge connected to those on the other by means of elastic elements which remain hidden under the foldable flaps, so that the tension of these elastic elements permits that the flat body tend to automatically and instantaneously become a tubular body, which constitutes the display stand in working situation.

[0009] It is only left to point out that, in order to prevent the undesired extension of the display stand when it is in storage or inoperative situation, it has been provided that the flat body configured thereby is foldable at its transversal middle line, so that this folding prevents the action of the aforementioned elastic elements for the extension of the tubular body, which requires a prior manual extension of the two halves of the flat tubular body for this manoeuvre.

DESCRIPTION OF THE DRAWINGS

[0010] In order to complement the description being carried out and with the object of helping towards a better understanding of the characteristics of the invention, in accordance with a preferred practical embodiment thereof, a set of drawings has been included as an integral part of said description wherein the following has been represented in an illustrative and non-limitative character:

Fig. 1 shows a frontal elevational view of one of the pieces which participates in the self-mountable display stand which constitutes the object of the present invention, specifically the frontal piece in the display stand assembly;

- Fig. 2 shows a frontal elevational view of the other laminar piece which participates in the display stand, i.e. the rear piece;
- Fig. 3 shows a cross-sectioned profile of the two pieces of the previous figures, duly assembled;
- Fig. 4 shows, finally, a series of sequences of a self-mountable display stand, carried out in accordance with the present invention, from its storage situation to its final situation of use, with four intermediate phases of self-mounting.

PREFERRED EMBODIMENT OF THE INVENTION

[0011] In view of the figures shown, it can be observed how the display stand proposed is constituted by means of two laminar pieces (1 and 2), preferably of cardboard, of a basically rectangular outline, of coinciding dimensions in length and approximate dimensions in width, as will be seen below, the frontal piece (1) incorporating a pair of longitudinal cutting and folding lines (3-4), which define in the laminar body three longitudinal sections, one intermediate section (5) and two lateral sections (6-6'). In the central section (5) is established in the die-cutting operation transversal slats (7) framed by respective pairs of folding lines (4) which connect them to the lateral sections (6), these slats (7) being delimited below by a cutting line (8) and above by a folding line (9), joining that cutting line (8) without continuity, to the corresponding lateral cutting lines (3) which divide the laminar body.

[0012] For their part, the folding lines (9) configure the hinge for respective flaps (10) which fold backwards and which will be discussed below.

[0013] For its part, the rear piece (2) incorporates two longitudinal folding lines (11) which define therein, just like in the first piece (1), three laterally adjacent sections, one central section (12) dimensionally coinciding with the section (5) of the frontal piece (1), and two lateral sections (13) coinciding in turn with the width of the lateral sections (6) of the frontal piece (1), in the initial position thereof whereafter, through a longitudinal folding line (14), are established tabs (14) which, provided with adhesive, overlap the marginal areas (13) of the rear piece (2) in order to join both pieces and make them into a tubular body.

[0014] For their part, the aforementioned flaps (10) of the frontal piece (1) feature a transversal folding line (15) next to its free edge and determinant of another slat (16), opposite to the slat (7), intended to attach itself by means of adhesive to the frontal face of the rear piece (2), said flaps (10) being foldable over themselves, just as the tubular body, through an intermediate folding line (17) parallel to that previously mentioned (15).

[0015] As a complement to the structure described, the rear piece (2) is equipped at the level of the fixed frontal slats (7) with pairs of lateral tabs (18) provided with holes (19) which allow the coupling of a rubber band or other elastic element which tends to tense the longitudinal joining edges between both pieces and, conse-

quently, to the self-mountable tubular body, or what is the same, to the self-assembly of the display stand.

[0016] The only thing left to point out is that, for the purpose of preventing the elastic elements from acting incorrectly, i.e. when the display stand is in storage situation, it is provided that the display stand, in collapsed position, collapses about its transversal and middle line (20), the display stand adopting the position shown in the 1st sequence of figure 4, wherein the abovementioned rubber bands or elastic elements are completely inoperative, it being sufficient to manually unfold the display stand from said position of the 1st sequence to that of the 4th sequence, so that from here it proceeds to the self-assembly thereof due to the effect of the aforementioned elastic elements, with a good positional stability thereof corresponding to the final sequence of an undefined form, while it is not manually actuated upon against said elastic elements.

Claims

1. Self-mountable display stand, of the type which configure a kind of prismatic column with panels at different heights, **characterized in that** it is constituted by means of the combination of two laminar pieces (1 and 2), preferably of corrugated cardboard, being defined in the frontal piece (1) a pair of combined longitudinal cutting and folding lines (4-3), positionally facing folding lines (11) disposed on the rear piece (2), so that one and the other permit the folding of both pieces in order to configure both U-sectioned channelled bodies, facing each other at their openings and the frontal piece (1) having longitudinal and marginal flaps (14) to attach by means of adhesive to the lateral sections or areas (13) of the rear piece (2), in order to configure a tubular body capable of adopting a flat or prismatic-rectangular disposition, at the same time that the longitudinal folding lines of the frontal piece (1) define therein foldable flaps (10) through the folding lines (9) and thanks to the existence of the cutting lines (3), flaps equipped on their transversal free edge with tabs (16) defined by folding lines (15) which permit fastening with the collaboration of adhesive of said flaps to the intermediate section (11) of the rear piece (2), at the same time that said flaps (10) are foldable over themselves by means of transversal folding lines (17).
2. Self-mountable display stand, according to claim 1, **characterized in that** the frontal piece (1) is capable of adapting to the rear piece (2) along its entire length in collapsed or inoperative position, and of automatically spreading out to the prismatic rectangular configuration position through effect of elastic elements established between the longitudinal edges of the rear piece (2), specifically between tabs (18) of the latter.

3. Self-mountable display stand, according to previous claims, **characterized in that** both joined pieces are equipped with a transversal middle folding line (15) which permits folding the tubular body in half, in collapsed situation, in order to prevent the undesired self-mounting of the display stand. 5

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FIG. 1

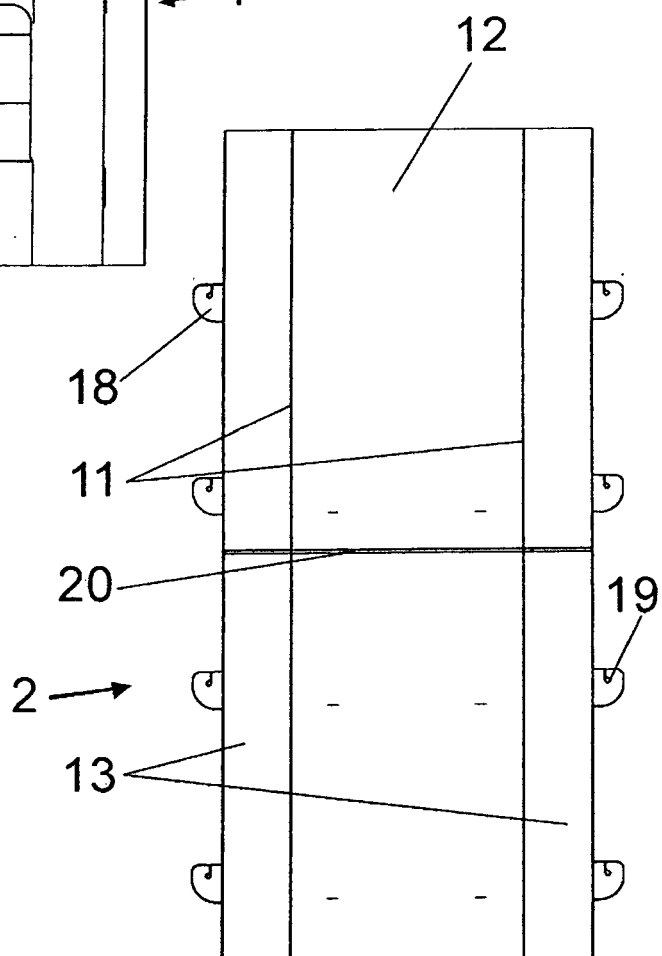
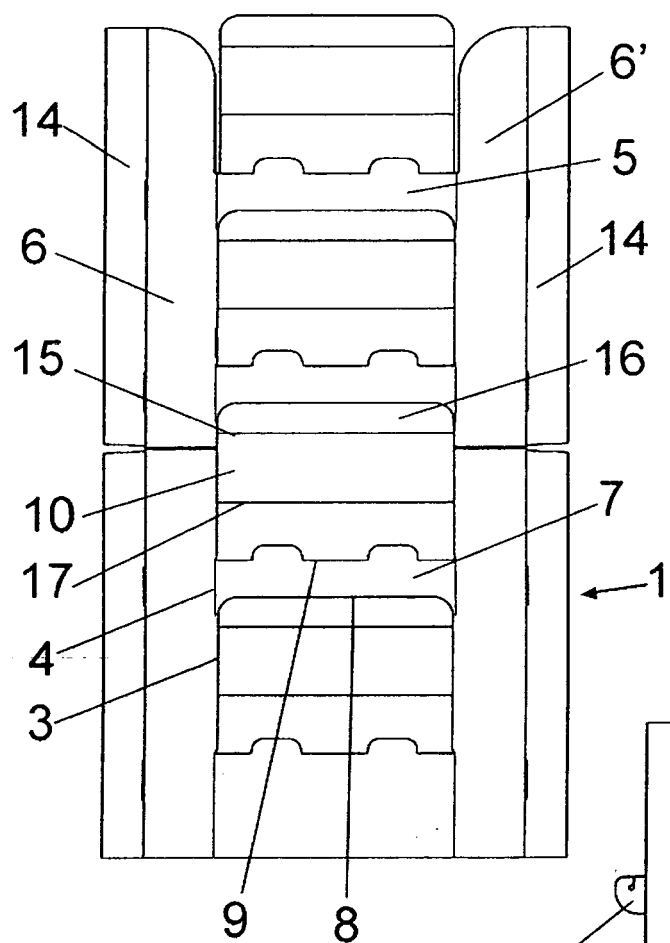


FIG. 2

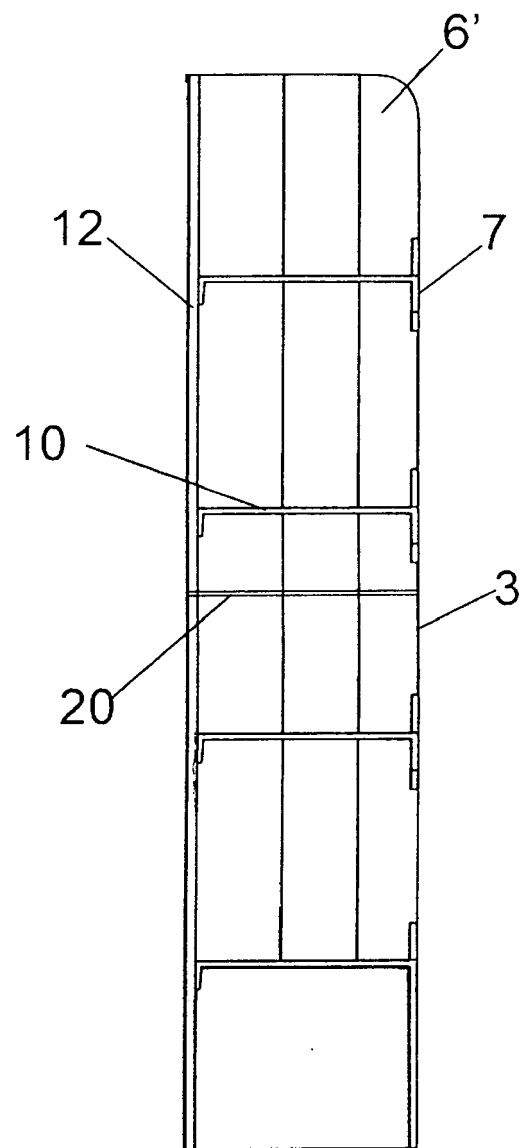


FIG. 3

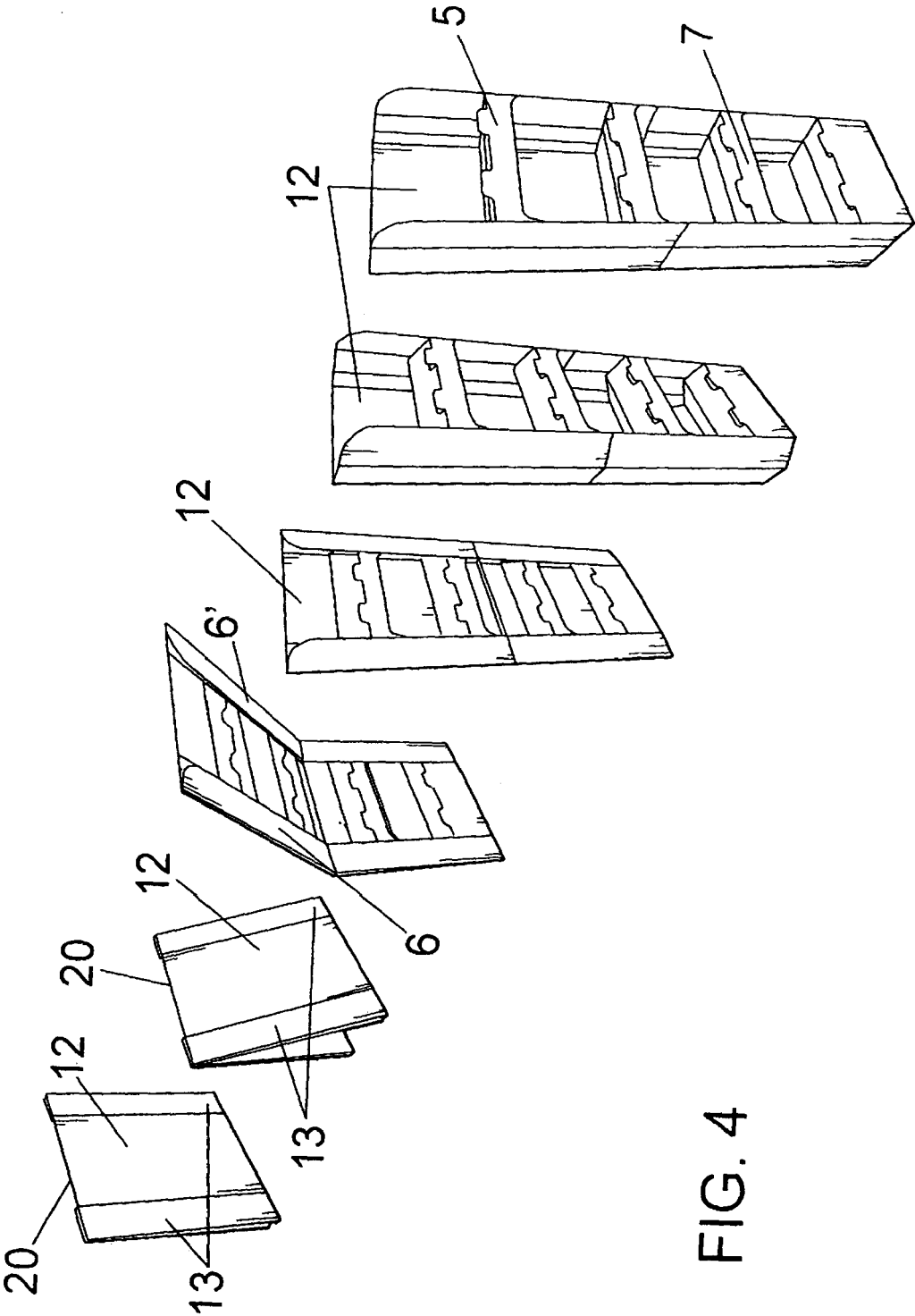


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 08 38 0310

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|---|---|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
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| A | US 2008/173602 A1 (FIELD DAVID L [US] ET AL) 24 July 2008 (2008-07-24) * the whole document * | 1-3 | |
| | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | A47F |
| The present search report has been drawn up for all claims | | | |
| Place of search Munich | | Date of completion of the search 20 March 2009 | Examiner Cardan, Cosmin |
| <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 & : member of the same patent family, corresponding document</p> | | | |

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EPO FORM 1503 03.82 (P04C01)

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

EP 08 38 0310

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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20-03-2009

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