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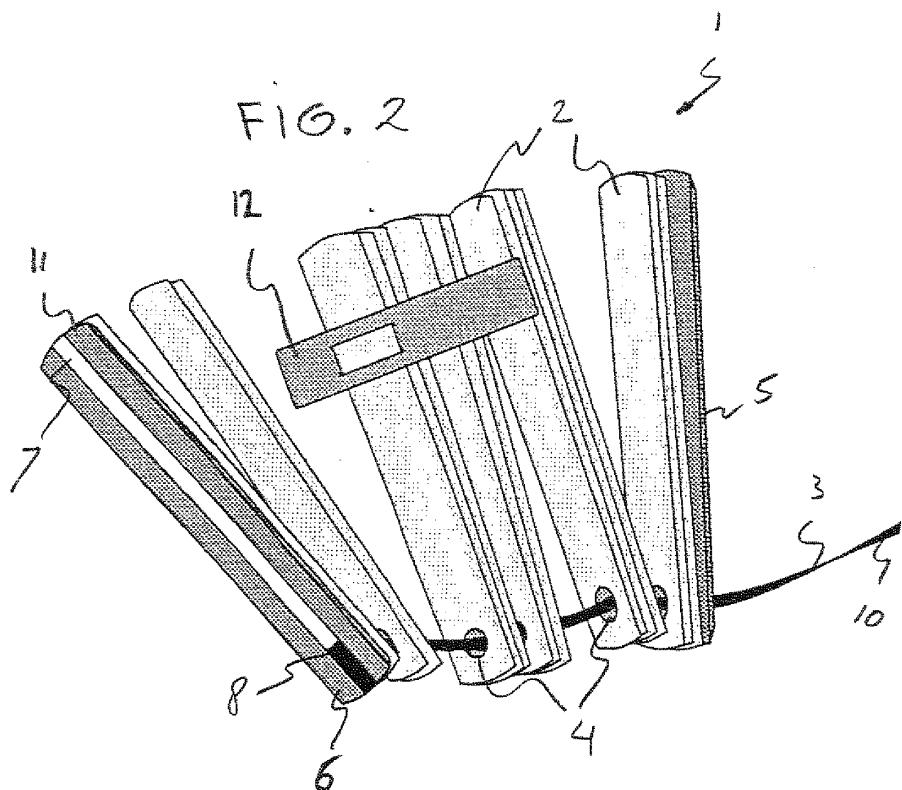
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(54) Swatch presentation device

(57) A swatch presentation device or colour fan comprising a stack of sample leaves and a coupling element inserted through aligned openings in each leaf, characterized in that the coupling element is a flexible band or cord having a length which is substantially longer than the thickness of the pile of leaves. One of the ends of the flexible band or cord is attached to the device. The device

comprises a front cover panel and a back cover panel sandwiching the stack of leaves. The back and/or front cover comprise a recess for receiving and clamping a section of the band. Fastener comprising a band of an elastic material, such as rubber, and at least two panels provided with a recess for receiving a section of the band in a clamping manner when the band is unstressed.



Description

[0001] The present invention relates to a swatch presentation device, such as a colour fan, comprising a stack of sample leaves and a coupling element inserted through aligned openings in each leaf.

[0002] Such devices are often used to present colour swatches or samples as a colour fan, in order to allow a user to select a colour, e.g., of a paint. EP-A 1 110 752 and US 4,104,809 disclose examples of such colour fans. The leaves, each showing one or more colour samples, are fanned out and a suitable colour can be selected. When a colour combination, rather than a single isolated colour, is to be selected, a user may wish to see the colours in combination in order to evaluate their mutual perceptual influence, as experienced by a human observer. To evaluate a combination of colour samples, the leaves have to be taken apart or a set of colour fans has to be used.

[0003] The object of the present invention is to provide a system allowing visual evaluation of colour combinations rather than single colours. This object has been achieved in the present invention by providing a swatch presentation device having a flexible cord or band as a coupling element joining the sample leaves, the cord or band having a length which is substantially longer than the thickness of the pile of leaves. This way, the leaves can be shifted apart and any combination of sample leaves can be held next to one another, irrespective of the order of the leaves. After use, the leaves can be piled up again by tightening the cord or band.

[0004] The cord may be flexible in that no force is needed to bend it, as with a usual rope or cable, or it may be of a more rigid material which can easily be bent without exerting substantial force by hand.

[0005] Optionally, the device comprises a front panel cover and a back panel cover sandwiching the stack of leaves. These covers can show labels, logos, additional information, etc. Moreover, these panel covers can provide means for attaching the band or cord. For instance, the back and/or front panel cover comprises a recess for receiving and clamping a section of the band or cord. To this end, the panel cover can be made of a sheet metal or a plastic material profiled in such a way that one of its sides shows the recess to clamp the cord.

[0006] One or both of the outer ends of the flexible band or cord may be releasably attached, e.g. by means of a snap joint or the like. After the releasably attached outer end is released, the leaves can be shifted apart and two or more selected leaves can be held next to each other. If the band or rope is releasably attached to a panel cover, the panel cover can have an opening in line with the openings in the leaves through which the band passes and the panel cover can be slid along the band.

[0007] The band can be made of an elastic material, such as a rubber, having a cross-section corresponding to the recess in the covers. When the rubber is stretched, the cross-section shrinks and can easily be placed in the

recess. After relaxation of the rubber, the cross section extends again and clamps itself in the recess. Whereas normally ropes or bands are stretched and stressed when tied, in this case the rubber band is relaxed and un-

5 stressed when it ties the fan in its closed position and clamps itself in the recess. As a result, the risk of band fatigue failure is minimized. The combination of the rubber band and the recess in the covers forms a fastener, particularly useful to hold together items like sample leafs.

[0008] To prevent the band sliding out of the aligned openings in the leaves or the panels unintentionally, one or both of the outer ends of the band can be made thicker than the diameter of the openings in the leaves.

[0009] Generally, each leaf is rectangular, having its opening near the middle of one of the shorter sides. However, the leaves may have any other suitable shape, if so desired.

[0010] The swatch presentation device may further be 20 provided with one or more masks made of a leaf with a window opening. The window can be positioned over a colour sample, in order to isolate the colour of the sample from neighbouring colour samples to get a purer impression of the colour. The mask itself can have any suitable 25 colour but neutral colours such as white or black are obviously preferred. The mask can for instance have a black side and a white side. The window opening can be bridged by a piece of mask material, leaving two slits through which the sample leaves can be slid.

[0011] The swatch presentation device according to 30 the invention is particularly useful as a colour fan, e.g. showing samples of paint colours. Such colour fans are for instance used in the do-it-yourself market and in the market of professional architectural paints, e.g., by architects, designers, professional painters, etc. However, it can also be used for other purposes, such as for the presentation of wallpaper samples or samples of floor 35 coverings.

[0012] The invention is further described and illustrated 40 by the following figures. In the drawings:

Figure 1: shows, in perspective view, a colour fan according to the invention;

Figure 2: shows the device of Figure 1 after detaching 45 the cord;

Figure 3: shows a detail of the cord clamped in a recess of one of the cover panels.

[0013] Figure 1 shows a swatch presentation device 50 or colour fan 1, which is shown in a fanned-out way in Figure 2. The colour fan 1 comprises a stack of sample leaves 2 and a band 3 serving as a coupling element to join the sample leaves 2. The band 3 is inserted through aligned openings 4 in each leaf 2. The band's length is

55 substantially longer than the thickness of the colour fan 1. The pile of leaves 2 is sandwiched between a front cover panel 5 and a back cover panel 6. The back cover panel 6 comprises a recess 7 forming a tight fit for the

outer end of the band 3. One of the outer ends 8 of the flexible band 3 is permanently attached to outer end 9 of the back cover panel 6. The other outer end 10 of the band 3 is loosened when the colour fan 1 is opened and in use. When the colour fan 1 is closed for storage, the band 3 is stretched to reduce the width of its cross-section and folded over the front cover panel 5 to the other outer end 11 of the back cover panel 6, where it is laid in the recess 7 of the back cover panel 6 and relaxed to clamp itself in the recesses 7 of the cover panels 5, 6, as shown in detail in Figure 3. The front cover panel 5 has a similar recess in which the middle part of the band 3 is clamped. The swatch presentation device 1 further includes a mask 12 made of a paper or cardboard leaf 13 with two slits 14, 15. A sample leaf of the presentation device 1 can be slid through the slits 14, 15, in order to view the colour samples on the leaf via a window 16 in the mask 12, isolated from neighboring colour samples. The mask 12 can be white on one side and black on the other.

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8. Fastener comprising a band of an elastic material, such as rubber, and at least one panel provided with a recess for receiving a section of the band in a clamping manner when the band is unstressed.

Claims

1. A swatch presentation device comprising a stack of sample leaves and a coupling element inserted through aligned openings in each leaf, **characterized in that** the coupling element is a flexible band or cord having a length which is substantially longer than the thickness of the pile of leaves.
2. A swatch presentation device according to claim 1, **characterized in that** one of the ends of the flexible band or cord is attached to the device.
3. A device according to claim 1 or 2, **characterized in that** the device comprises a front cover panel and a back cover panel sandwiching the stack of leaves.
4. A device according to claim 3, **characterized in that** the back and/or front cover comprises a recess for receiving and clamping a section of the band.
5. A device according to claim 4 **characterized in that** the band is made of an elastic material, such as rubber, having a cross section which, in a stressed state, is smaller than the cross section of the recess, and, in an unstressed state, is larger than the cross section of the recess.
6. A device according to any one of the preceding claims, **characterized in that** at least one of the outer ends of the band is thicker than the diameter of the openings in the leaves.
7. A device according to any one of the preceding claims, **characterized in that** the swatches are colour samples.

FIG. 1

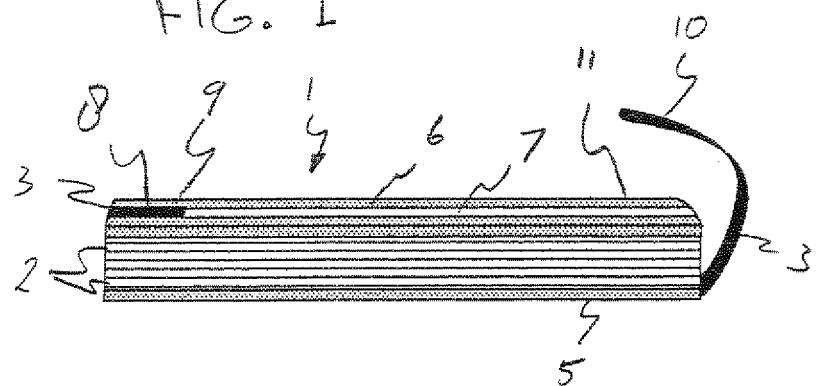
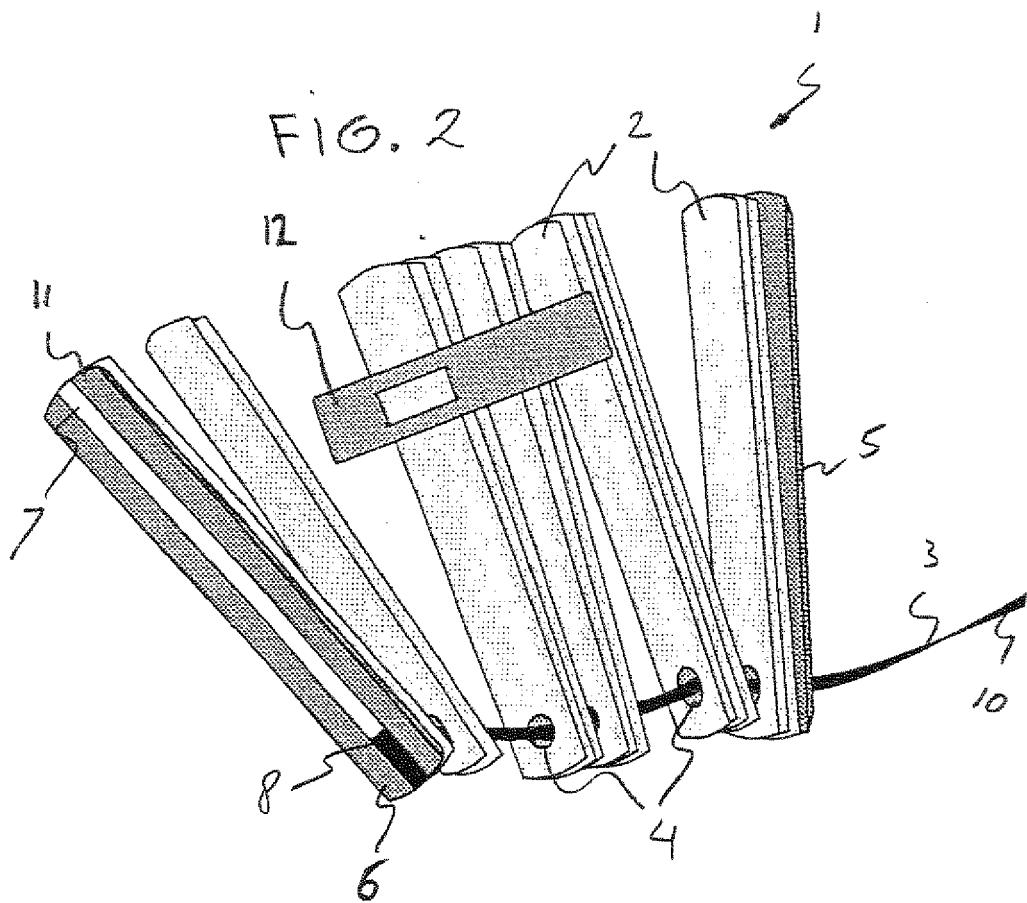


FIG. 2



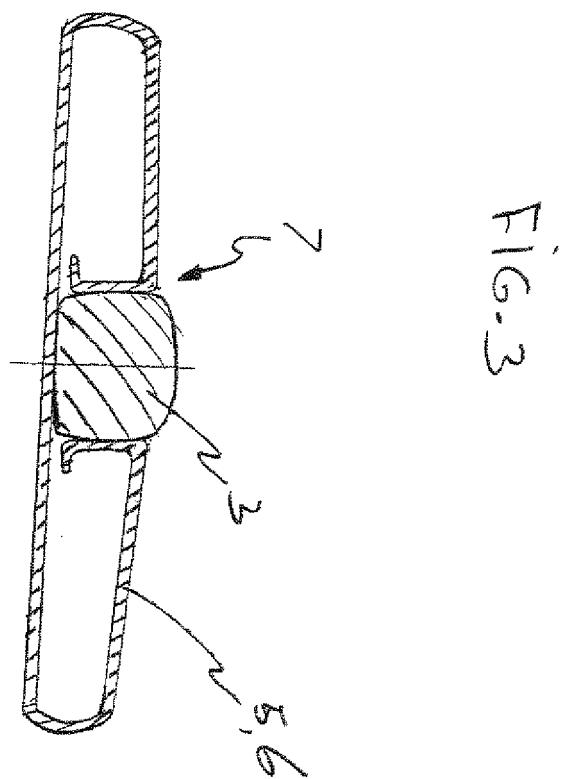


FIG.-3



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	GB 23431 A A.D. 1910 (PIERRE HECTOR BROUSSARD) 16 February 1911 (1911-02-16) * page 2, line 25 - line 43; figure 1 *	1,2,5,6	INV. G09F5/04
Y	-----	3,4	
Y	FR 2 474 731 A (MELCER PATRICK) 31 July 1981 (1981-07-31)	3,4	
A	* page 1, line 32 - page 2, line 15; figures 3,7 *	1,2,5-8	

A,D	EP 1 110 752 A (AKZO NOBEL N.V) 27 June 2001 (2001-06-27) * abstract; figure 1 *	1-8	

A,D	US 4 104 809 A (DAY ET AL) 8 August 1978 (1978-08-08) * the whole document *	1-8	

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
2	Place of search	Date of completion of the search	Examiner
	Munich	13 April 2006	Pavlov, V
CATEGORY OF CITED DOCUMENTS		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	
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			

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

EP 05 11 2445

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-04-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 191023431	A	16-02-1911	NONE	
FR 2474731	A	31-07-1981	NONE	
EP 1110752	A	27-06-2001	NONE	
US 4104809	A	08-08-1978	NONE	