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(54) **Tissue box**

(57) The present invention relates to a tissue box (10) comprising a dispensing orifice (20) which is releasably covered by an orifice cover (22), wherein said orifice cover (22) is attached to a sheet of material (30).

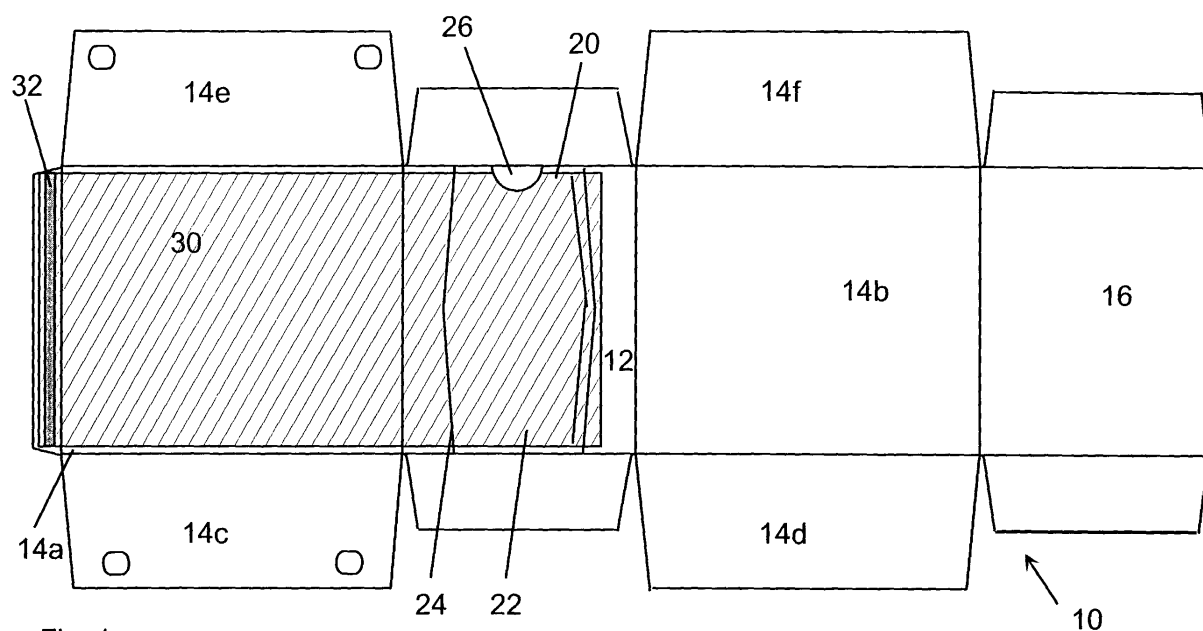


Fig. 1

Description

Field of the invention

[0001] The present invention relates to a tissue box. This tissue box comprises a dispensing orifice, which is covered prior to use of the box and needs to be opened before tissues can be dispensed therethrough. Claimed and described is a tissue box comprising a dispensing orifice which is releasably covered by a orifice cover, wherein said orifice cover is attached to a sheet of material.

Background of the invention

[0002] The present invention relates to a tissue box. Such a box typically comprise an orifice through which the tissues can be dispensed, and is also referred to as pop-up box.

[0003] Tissues are sensitive to moisture and also easily suffer from dust or dirt. Therefore, it is important to cover the dispensing of this prior to use of the box, e.g. while the box is shipped or stored or offered for sale.

[0004] US 2, 656,916, Sello cotton product company, discloses a tissue package comprising a flap which allows opening of the orifice by a perforation around the orifice, but which remains hingely connected to the tissue box.

[0005] US 4, 623, 074, Procter & Gamble, discloses a package provided from a carton. The carton comprises a tear-out panel defined by a line of weakening. The tear-out panel further comprises a pull tab.

[0006] Tissue boxes marketed in the United States by the Procter & Gamble company, under the brand name of 'PUFFS', are provided from cardboard and comprise a dispensing opening, which prior to use is solely covered by a foil of a polymeric wrapping material, adhesively attached to the tissue box.

[0007] In such a pop-up box the tissues are typically inter-folded to form the stack of tissues, and the dispensing orifice is designed to help dispensing them one by one in such a way that when one tissue is removed from the box, the following one is partially pulled out, and is held in a substantially up-right position by the dispensing orifice, so that it is comfortable for the user to grab and pull it during the next use. In some cases the dispensing orifice is further equipped with a paper or plastic insert.

[0008] Some problems sometimes occur when removing inter-folded tissues from a box, such as chaining, and fall-back, for example. Such problems can be particularly pertinent if the dispensing orifice is damaged, or the orifice insert is damaged, or the tissues have become moist or contaminated. Such problems are often due to friction of tissues onto the insert, or between them, and/or due to an inappropriate shape for the dispensing opening. Chaining is defined as the fact that several tissues are pulled out all-together when pulling one tissue from the box. Tissue chaining leads to

dispensing more than one tissue at a time, which is clearly not the purpose of the pop-up system, and is clearly undesirable to the consumer. Fall-back of tissues is defined as the fact that a subsequent tissue one completely stays in the box when removing a first pop-up tissue from the box, which again is clearly not the purpose of a pop-up system.

[0009] The following references are directed to tissue boxes and address problems in relation to the dispensing of tissues therefrom:

US 5,316,177, Kimberly-Clark, discloses a pop-up facial tissue dispenser carton box which comprises a paper dispensing window. The dispensing window is provided with an elongated opening having two or more slits emanating from its two ends so that a means for holding the dispensed tissue is provided.

German Utility model G9108036, VPS, discloses a carton tissue box having an opening located in one of its sides. A paper insert at least partially covers the box opening and comprises an opening as well. The opening in the orifice insert is such that it reaches the border line of the box opening in at least two points.

WO 99/55599, Procter & Gamble, discloses a tissue box with an improved resilient dispensing insert.

[0010] In view of the prior art it is one main objective of the present invention to provide a tissue box, which is easy to use and which can be easily and economically produced.

[0011] It is a further objective to provide a tissue box, which offers prior to use good protection for its contents, namely good protection against dust, moisture and the like.

[0012] It is yet a further objective to provide a tissue box, which is easy to open.

[0013] It is yet a further objective to provide a tissue box allowing for optimal dispensing, in particular avoiding chaining and fall-back.

[0014] It is a yet even further objective to provide a tissue box, which is provided with indicia prior to use, but which does not carry such indicia once it is opened.

Summary of the invention

[0015] The present invention relates to a tissue box (10). Claimed and described is a tissue box (10) comprising a dispensing orifice (20) which is releasably covered by a orifice cover (22), wherein said orifice cover (22) is attached to a sheet of material (30).

Brief description of the drawings

[0016] The invention will now be explained in detail with reference to the accompanying drawing, in which:

- Figure 1 is an on top view of the folding pattern which defines the shape of the tissue box

Detailed description of the invention

[0017] Any tissue box (10) known in the art can be provided according to the present invention. The box (10) may comprise moist tissues, also referred to as wet wipes, or dry tissues, the latter being preferred. The tissues can be provided from any quality of paper, for example conventional paper, through air dried paper, single-ply paper or multi-ply paper. The term "tissue", as used herein, also refers to thicker paper qualities, which sometimes are referred to as paper towels or kitchen towels or simply as towels. While the box will preferably comprise a stack of separated pieces of tissue paper, the box may also comprise tissue paper in another form, eg. a roll of tissue paper.

[0018] While the term tissue box (10) preferably refers to a box for paper tissue, the term as used herein is to be understood in a broad sense, comprising any container for any absorbent article.

[0019] The tissue box (10) of the present invention may have any suitable form, but preferably has the form of a rectangle parallelepiped hence, preferably the tissue box comprises a top panel (12), side panels (14) and a bottom panel (16), as visible in Figure 1. As used herein, the term side panel (12) is used for the panel with comprises the center of the dispensing orifice (20). These panels, and in particular the side panels (12) may not be provided from a single piece of material but may be formed from overlapping flaps, such as the flaps (14c) and (14e) as well as (14d) and (14f) shown in Figure 1. Of course some of the side panels may also be provided from a continuous sheet of material, such as (14a) and (14b) shown in Figure 1.

[0020] The tissue box (10) may be provided from any suitable material, flat or corrugated, preferred is a cardboard or paper material, flat cardboard being most preferred. The box (10) may also be provided from a combination of different materials.

[0021] The top panel (12) of the tissue box (10) is provided with a dispensing orifice (20). In some embodiments of the tissue box (10) a portion of the dispensing orifice (20) may also extend into any of the side panels (14). Prior to use of the box, the dispensing of this (20) is preferably covered by a orifice cover (22). The orifice cover (22) may also be provided from any suitable material however, is preferably provided from the same material as the tissue box. The orifice cover (22) is releasably attached to the tissue box (10) by the attachment means (24) for the orifice insert. Suitable attachment means include hot and cold crimping or adhesive attachment. However, preferably the attachment means (24) is a perforation line or a similar line of weakness. In such a preferred embodiment the dispensing orifice (20) can simply be defined by a perforation line (24) and is provided with an orifice cover (22) without the need to provide a separate piece of material.

vide a separate piece of material.

[0022] The dispensing orifice (20) may have any suitable form may it be rectangular or circular or oval. The orifice cover (22) should have substantially the same form as the dispensing orifice (20), but in a preferred embodiment of the present invention the orifice cover (22) will comprise a finger hole (26) to allow for easier removal of the orifice cover (22). Preferably the finger hole (26) has the form of a half-circle. In a preferred embodiment of the present invention the finger hole (26) is also provided by a perforation or line of weakening.

[0023] According to the present invention the tissue box (10) is provided with a sheet of material (30). This sheet of material can be provided from any suitable material, preferably is provided from a malleable material. Highly preferred materials are malleable sheets of a polymer material, most preferably polyethylene or polypropylene. The sheet of material (30) can be attached to the outside of the box by any suitable attachment means (32) for the sheet of material (30), be it releasable or permanent. Such means include hot and cold crimping and adhesive attachment. It is highly preferred that at least one such attachment means (32) provides for attachment of the sheet of material (30) to the orifice cover (22). Preferably the attachment to the orifice cover (22) is permanent. This facilitates the removal of the sheet of material (30) together with the orifice cover (22). If the sheet of material (30) is attached to a further portion of the tissue box (10) preferably such attachment is either releasable or the sheet of material (30) is provided with a line of weakening, eg. perforation line, in the vicinity of a non-releasable attachment. In preferred embodiments of the present invention the sheet of material (30) is attached to the tissue box by two stripes of adhesive as visible in Figure 1.

[0024] The sheet of material (30) covers at least the area of the dispensing orifice (20), preferably also a portion of the top panel (12), preferably at least 70%, more preferably at least 80%, yet more preferably at least 90% of the surface area of the top panel (12). Preferably the sheet of material (30) also covers at least a portion of at least one side panel (14), preferably at least 70%, more preferably at least 80%, yet more preferably at least 90% of at least one side panel. While coverage of one side panel is preferred according to the present invention the sheet of material (30) may alternatively also cover 2 or 3 or even all 4 side panels and also the bottom panel of the tissue box (10). In one preferred embodiment of the present invention the sheet of material (30) covers a portion of the top panel (12), one side panel (14a), the bottom panel (16) and the opposite side panel (14b), and again preferably at least 70%, more preferably 80%, yet more preferably 90% of the respective panels are covered. According to the present invention it is highly preferred that the sheet of material (30) covers any line of weakening, namely any perforation line which is present in the box hence in particular perforation lines (24) around the dispensing orifice (20) and the finger

hole (26).

[0025] In preferred embodiments of the present invention the sheet of material (30) is provided with indicia, displaying, for example, artwork, a brand name or usage instructions. Such indicia may be provided by any suitable means, for example printing or engraving.

[0026] The provision of a tissue box (10) in the manner described herein achieves a number of benefits:

[0027] In one aspect the tissue box (10) and in particular its orifice (20) and its contents, the tissues, are better protected because the sheet of material (30) offers an extra layer of protective material for the outside of the tissue box. In this context it is important that in preferred embodiments of the present invention the sheet of material (30) covers the perforation lines which may be present as attachment means (24) and round the finger hole (26), since such perforation lines potentially allow moisture, dirt, dust and other contaminants to enter the tissue box (10).

[0028] This additional protection for the tissue box (10), in one preferred embodiment of the invention, is achieved by covering only the top panel (12) and one side panel (14) of the box and hence with a relatively low amount of material. However, in this embodiment the most critical panels of the box are protected. Notably, it is possible to stack a number of boxes in such a manner, that only the top panels (12) and the side panels (14) covered by the sheet of material (30) are exposed.

[0029] In another aspect of the present invention it is possible to provide the tissue box (10) with a different visual appearance prior to use and when opened. In preferred embodiments of the present invention the sheet of material (30) may for example carry usage instructions which the consumer will appreciate prior to use of the box but does not need to refer to again once the box is opened. Similarly, the sheet of material (30) may comprise a brand logo which is important when the box is offered for sale, however the consumer may wish to remove such a brand logo once he uses the box and solely look at the panels (12, 14, 16) of the tissue box (10), which may in some preferred embodiments be printed with a brand neutral and highly decorative artwork.

[0030] In another aspect of the present invention the tissue box (10) as described herein allows a highly streamlined production process. The box can be provided in an unfolded stage however already comprising the sheet of material (30) as shown in Figure 1, before being folded and filled with e.g. a stack of tissues. Prior art tissue boxes, which could achieve a similar level of protection for the tissues, needed to be wrapped with a suitable wrapping material after being filled with the stack of tissues. This meant an additional and separate production step which has become obsolete by the present invention, so that considerable cost savings can be achieved. Such cost savings are particularly pertinent if the box is provided from a different manufacturer than the tissues.

Claims

1. A tissue box (10) comprising a dispensing orifice (20) which is releasably covered by a orifice cover (22), **characterized in that** said orifice cover (22) is attached to a sheet of material (30).
2. A tissue box (10) according to Claim 1, **characterized in that** said tissue box (10) has the form of a rectangle parallelepiped.
3. A tissue box (10) according to Claim 2, said tissue box (10) comprising a top panel (12), four side panels (14) and a bottom panel (16), the top panel (12) comprising said dispensing orifice (20), **characterized in that** said sheet of material (30) extends over at least 70% of the surface area of said top panel (12).
4. A tissue box (10) according to Claim 3, **characterized in that** said sheet of material (30) further extends over at least 70% of the surface area of at least one of said side panels (14).
5. A tissue box (10) according to any one of the preceding claims **characterized in that** said tissue box (10) and said orifice cover (22) are provided from the same material.
6. A tissue box (10) according to any one of the preceding claims **characterized in that** said tissue box (10) is provided from cardboard.
7. A tissue box (10) according to any one of the preceding claims **characterized in that** said sheet of material (30) is provided from a polymer material.
8. A tissue box (10) according to any one of the preceding claims **characterized in that** said sheet of material (30) is provided with art work or usage instructions.
9. A tissue box (10) according to any one of the preceding claims **characterized in that** said orifice cover (22) is provided with a finger hole (26) to allow for easy removal of said orifice cover (22).

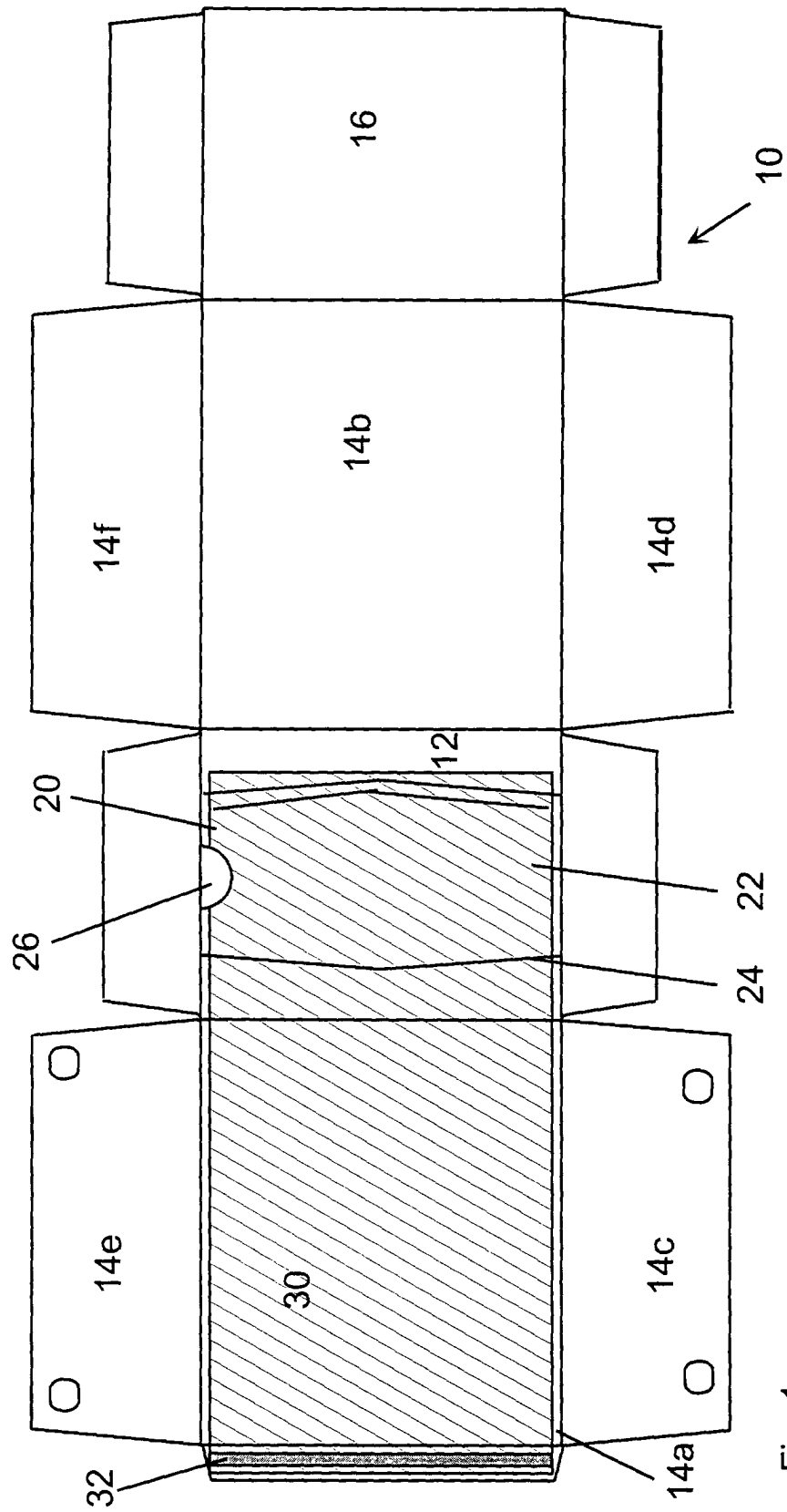


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 12 0457

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	WO 95 25668 A (BLANK PAPER PRODUCTS) 28 September 1995 (1995-09-28)	1-7	B65D83/08 B65D5/42
Y	* page 4, line 20 - page 6, line 4; figures 1,2 *	8,9	
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	* column 6, line 4 - column 8, line 21; figures 3-6 *		

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) B65D
Place of search THE HAGUE		Date of completion of the search 15 February 2001	Examiner Berrington, N
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 00 12 0457

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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