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# (54) BAG MADE OF PAPER MATERIAL FOR ARCHIVING/PLACING ARTICLES AND METHOD FOR ARCHIVING/PLACING AN ARTICLE IN SAID BAG

(57) Bag made of paper material for archiving/placing articles, which comprises a containment volume, delimited by a first sheet-like element (103) and a second sheet-like element (104), and a closure flap (1), projectingly extended from the first sheet-like element and susceptible of being folded, at least partially superimposed on the second sheet-like element (104) in order to close the bag.

The closure flap (1) is provided with a first portion (2) for a first closure of the bag and with a second portion (6) for a second closure of the bag, in which the first portion (2) is extended between a first free end (4) of the closure flap (1) and a first weakening line (5), the latter being susceptible of being torn in order to separate the first portion (2) from the closure flap (1) for a first opening of the bag.

In addition, the bag is provided with a removable flap (8) projectingly extended from the second sheet-like element (104) between a second free end (9) and a second weakening line (10), the latter being susceptible of being torn in order to remove the removable flap (8) from the second sheet-like element (104).

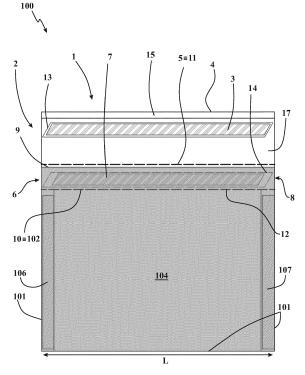


Fig. 1

EP 3 564 146 A1

#### Field of application

**[0001]** The present invention regards a bag made of paper material for archiving/placing articles and a method for archiving/placing an article in said bag, according to the preamble of the respective independent claims.

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**[0002]** The present bag is intended to be employed in the packaging field, for packaging many different articles, which are advantageously intended to be mailed, such as articles acquired via Internet.

**[0003]** More particularly, the bag, object of the present invention, is advantageously employable for archiving/placing an article multiple times, i.e. for archiving/placing it a first time in order to allow mailing the purchased article from the seller to the buyer and for archiving/placing it a second time in order to allow mailing the article-to-be-returned from the buyer once again to the seller.

**[0004]** The invention is therefore inserted in the context of the industrial field of production of packaging and in particular in the production of packaging for the transportation and the mailing of articles.

#### State of the art

**[0005]** As is known, bags have been on the market for years which are made of paper material for archiving/placing articles intended to be transported and/or mailed, for example by means of the postal service or by means of courier.

**[0006]** The bags of known type are provided with two sheet-like elements, including one front and one rear, which generally have rectangular shape; such elements are placed facing each other and are joined together at three of their four perimeter margins, thus defining a containment volume for the articles to be archived/placed.

**[0007]** In addition, the bags of known type are provided with an access opening to the containment volume, such opening delimited by the two free perimeter margins of the two sheet-like elements, i.e. by the free perimeter margin of the front element and by the free perimeter margin of the rear element.

**[0008]** The bags made of paper material of known type are also provided with a closure flap, which is generally made integrally with the rear element, projecting from its access margin; it is susceptible of being folded above the front sheet-like element to cover the access opening of the bag.

**[0009]** In addition, such closure flap is generally provided with an adhesive material strip in order to fix the closure flap itself to the front sheet-like element, in a manner such to ensure the closure of the access opening and prevent the content of the bag from exiting outward during transport.

**[0010]** Recently, with the development of on-line purchasing and the consequent increase of mailing of goods,

even small-size goods, there is consequently an increased need to have bags for archiving/placing articles, and in particular bags that can be used more than once, for example for returning purchased goods.

[0011] Indeed, the main drawback of on-line purchasing is the fact that the client cannot view the goods before purchase, with the risk that he/she will not be satisfied with the completed purchase. Consequently, most of the websites that allow making on-line purchases also allow the return of the purchased goods, which, once received and viewed by the client, must be once again archived/placed in a bag and mailed again to the sender. [0012] The bags of known type used for mailing articles purchased on-line also comprise information regarding the article itself or details regarding the mailing, which are generally printed on the bag itself and must also be present in the bag containing the returned article, so to be read and deciphered by the courier and/or by the online store in order to allow a correct processing of the mailing and classification of the returned article.

**[0013]** In order to facilitate such return operations, the bags of known type used for sending articles purchased on-line are generally reusable bags, i.e. bags which, once mailed by the sender to the client, can be opened in order to allow viewing the article at their interior and can subsequently be reclosed and mailed again by the client to the seller in order to return the article.

**[0014]** The above-described bags made of paper material of known type have in practice demonstrated that they are unsuitable for being reused since, in order to open them, it is necessary to remove the part of the closure flap glued to the front portion. The paper material in which the bag is made is, due to its nature, rather fragile and hence it frequently happens that the receiver of the bag - during the opening of the bag itself - tears the entire closure flap, thus rendering the bag no longer usable since it can no longer be reclosed.

**[0015]** In order to overcome the aforesaid drawback, bags made of flexible plastic material have been developed (generally made of polyethylene) which are susceptible of being closed, opened and subsequently reclosed.

**[0016]** Analogous to the bags made of paper material of known type, also the plastic material bags are provided with a closure flap, which in turn is provided with a first adhesive material strip for the first closure of the bag.

**[0017]** In addition, such bags made of plastic material are provided with a first weakening line, arranged parallel to the first adhesive material strip, and along such weakening line it is possible to act in order to tear only the flap portion glued to the front portion of the bag. In particular, the first weakening line is placed in an intermediate position of the closure flap, such that following the first step of opening the bag, the latter is provided with a remaining portion of the closure flap sufficient to allow reclosing the bag itself.

**[0018]** In addition, the bags made of plastic material of known type provide for a second adhesive material strip,

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above which the remaining portion of the closure flap must be refolded so as to determine a second closure of the bag.

**[0019]** More in detail, the second adhesive material strip is arranged along the front sheet-like element, far from the point at which the closure flap is closed during the first step of closing the bag, so as to prevent such second adhesive material strip from being ruined when the receiver opens the bag.

**[0020]** In operation, after having torn the glued portion of the closure flap during the first opening of the bag, so as to reclose the bag for the second time, it is then necessary to refold the remaining portion of the closure flap above the second adhesive strip. However, since the second adhesive strip is placed in a distal position with respect to the remaining closure flap, beyond the latter it is necessary to also fold an upper portion of the two sheet-like elements of the bag, in order to allow the remaining portion of the closure flap to reach the second adhesive material strip and hence to close the bag for the second time.

**[0021]** However, this solution is not applicable to bags made of paper material since the latter material is fragile, and hence easy to break during the bag opening and reclosing operations. In addition, the paper material is simultaneously rigid and hence unsuitable for refolding a bag portion above the second adhesive material strip in order to obtain the second closure of the bag made of paper material.

**[0022]** In addition, the above-described solution involves a loss of the containment volume of the bag since it provides for, as stated above, refolding a portion of the two sheet-like elements of the bag so as to allow the reclosure of the bag itself.

**[0023]** Due to their ability to be reused, plastic material bags are used much more frequently than paper material bags for mailing articles purchased over the Internet.

**[0024]** Nevertheless, even plastic material bags have in practice demonstrated that they do not lack drawbacks. The main drawback derives from the fact that such plastic material bags have a much greater impact on the environment with respect to the impact of the paper bags, both due to their production and to their recycling.

**[0025]** Consequently, there is an increasing number of users (both sellers who use the bags in the first mailing, and clients who use the bags in the second mailing) who prefer using bags made of biodegradable material, such as paper. Even if this involves not being able to reuse the same bag after its first closure.

#### Presentation of the invention

**[0026]** In this situation, the problem underlying the present invention is therefore that of overcoming the drawbacks manifested by the bags of known type, by providing a bag made of paper material for archiving/placing articles, which allows a reuse thereof after the first closure.

**[0027]** A further object of the present invention is to provide a bag made of paper material that is structurally solid, which allows executing the operations of closing, opening and reclosing without being damaged.

[0028] A further object of the present invention is to provide a bag made of paper material which allows executing the operations of closing, opening and reclosing in a quick and facilitated manner and which does not depend on the ability of the operator who handles the bag.

[0029] A further object of the present invention is to provide a bag made of paper material which allows executing the operations of closing, opening and reclosing without losing the containment capacity during the reclosing of the bag itself.

[5030] A further object of the present invention is to provide a bag which allows executing the operations of closing, opening and reclosing, which is made of biodegradable material.

### Brief description of the drawings

**[0031]** The technical characteristics of the invention, according to the aforesaid objects, can be clearly seen in the contents of the below-reported claims and the advantages thereof will be more evident in the following detailed description, made with reference to the enclosed drawings, which represent a merely exemplifying and non-limiting embodiment of the invention, in which:

- Figure 1 shows a front view of a bag made of paper material for archiving/placing articles, object of the present invention, in which the closure flap is not folded to close the access opening and in which the front sheet-like element is shown with a darker color than the rear sheet-like element in order to better underline the distinction between the two;
- Figure 2 shows a rear view of the bag of figure 1;
- Figure 3 shows a plan extension of the bag of figure 1, in which the internal surface of the bag is visible;
- Figure 4 shows a plan extension of the bag of figure 1, in which the external surface of the bag is visible;
- Figure 5 shows a front view of the bag of figure 1 following a first step of closing the bag itself;
- Figure 6 shows a front view of the bag of figure 1
   following a step of removing a removable flap of the bag itself;
  - Figure 7 shows a front view of the bag of figure 1 following second step of closing the bag itself.

# Detailed description of a preferred embodiment

**[0032]** With reference to the enclosed drawings, reference number 100 overall indicates a bag made of paper material, according to the present invention.

**[0033]** In particular, the bag 100 can be made of one or more layers of paper material that are joined together or by one or more layers of paper material joined to one or more layers of plastic material, for example in order

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to make the bag 100 itself impermeable.

**[0034]** By "paper material", in this document, it is to be intended a material comprising soy cellulose or with other components in order to form any one type of paper or cardboard, of any weight or basis weight, which must be refolded on itself.

**[0035]** The present bag 100 is intended to be employed for archiving/placing articles of various type and preferably articles to be mailed, e.g. by means of postal service or by means of courier.

**[0036]** The bag 100, object of the present invention, comprises a first rear sheet-like element 103, and a second front sheet-like element 104, superimposed and delimiting between them a containment volume of the bag 100, which is intended to contain articles to be archived/placed.

**[0037]** The first sheet-like element 103 and the second sheet-like element 104 preferably have rectangular shape and are each provided with at least three constrained margins 101 and with at least one access margin 102.

[0038] More in detail, each constrained margin 101 of the first sheet-like element 103 is superimposed on and fixed to a corresponding constrained margin 101 of the opposite sheet-like element 104, and the access margin 102 of the first sheet-like element 103 is superimposed on the corresponding access margin 102 of the opposite sheet-like element 104. The two access margins 102, separated from each other, delimit between them an access opening to the containment volume of the bag 100. [0039] In accordance with a preferred embodiment illustrated in figures 3 and 4, the first sheet-like element 103 and the second sheet-like element 104 are integrally made and are joined together by means of one or more folds 105 arranged at a constrained margin 101 of each sheet-like element 103, 104 and in particular arranged at the constrained margin 101 opposite the access margin 102.

**[0040]** In addition, the remaining two constrained margins 101 of each sheet-like element 103, 104 are joined together respectively by means of a third adhesive strip 106 and a fourth adhesive strip 107, preferably arranged along the internal face of each sheet-like element 103, 104, i.e. along the face of the first and second sheet-like element 103, 104 directed towards the opposite sheet-like element 103, 104.

**[0041]** According to the invention, the bag 100 also comprises a closure flap 1, which is projectingly extended from the access margin 102 of the first sheet-like element 103 and is preferably made integrally with the first sheet-like element 103 itself.

**[0042]** In operation, the closure flap 1 is susceptible of being folded at least partially superimposed on the second sheet-like element 104 in order to close the access opening to the containment volume of the bag 100. In other words, the closure flap 1 is extended beyond the access margin 102 of the opposite second sheet-like element 104, and is susceptible of being folded around the

latter until it is at least partially superimposed on the second sheet-like element 104 in order to close the access opening to the containment volume of the bag 100.

**[0043]** According to the invention, the closure flap 1 of the bag 100 is provided with a first portion 2, for a first closure of the bag 100, and a second portion 6 for a second closure of the bag 100 itself.

**[0044]** More in detail, the first portion 2 is extended between a first free end 4 of the closure flap 1 and a first weakening line 5, and the second portion 6 is extended between the first weakening line 5 and the access margin 102 of the first sheet-like element 103 from which the closure flap 1 is extended.

[0045] In addition, the first portion 2 of the closure flap 1 is susceptible of being torn along the first weakening line 5 in order to separate the first portion 2 from the closure flap 1 at a first opening of the bag 100, in order to allow the first opening of the bag 100 itself. Advantageously, the first weakening line 5 can be made by means of a per se known process, for example it can be made by means of a series of holes arranged aligned and close to each other along the first weakening line 5 itself, thus creating a specific zone in which it is easier to tear the first portion 2 of the closure flap 1 for the opening of the bag 100.

**[0046]** According to the invention, moreover, the first portion 2 of the closure flap 1 is provided with a first folding line 11, along which the first portion 2 is susceptible of being folded for the first closure of the bag 100, and the second portion 6 of the closure flap 1 is provided with a second folding line 12, along which the second portion 6 is susceptible of being folded for the second closure of the bag 100.

**[0047]** In addition, the first portion 2 of the flap 1 is also provided with a first adhesive strip 3 and the second portion 6 is provided with a second adhesive strip 7, in order to fix the first portion 2 and the second portion 6 to the second sheet-like element 104 respectively in the first and in the second closure of the bag 100.

[0048] Preferably, in accordance with the enclosed figures, the aforesaid first folding line 11 is separate with respect to the second folding line 12 (and hence spaced therefrom) in order to allow the closure flap 1 to be folded along two separate folds in the first and second closure of the bag 100, as is better described hereinbelow with reference to the method for archiving/placing an article in such bag 100.

**[0049]** In particular, the first folding line 11 is positioned between the first free end 4 of the closure flap 1 and the second folding line 12 of the second portion 6 and preferably it is parallel to the latter.

**[0050]** In accordance with the preferred embodiment, the first folding line 11 is placed at the first weakening line 5 and preferably coincides with the latter, as indicated in figure 1.

**[0051]** In accordance with a second embodiment, not indicated in the enclosed figures, the first folding line 11 is placed in proximity to the first weakening line 5, with

the first weakening line 5 interposed between the first folding line 11 and the first free end 4 of the closure flap 1. **[0052]** In accordance with a third embodiment, not indicated in the enclosed figures, the first folding line 11 is placed in proximity to the first weakening line 5 and is interposed between the aforesaid first weakening line 5 and the first free end 4 of the closure flap 1. Advantageously, in the aforesaid second and third embodiment, the folding line 11 is more robust than the folding line 11 of the preferred embodiment, which coincides with the first weakening line 5.

**[0053]** In accordance with the embodiment indicated in figure 2, the second folding line 12 is preferably placed at the access margin 102 of the first sheet-like element 103 and preferably coincides with the latter.

**[0054]** The first and/or the second folding line 11, 12 can be advantageously made by means of processes of known type, for example by means of creasing the paper material, or by means of making a recess along the entire folding line, along which the paper material is susceptible of being folded by approaching the two walls of the recess.

**[0055]** According to the idea underlying the present invention, the paper material bag 100 is provided with a removable flap 8 projectingly extended from the access margin 102 of the second sheet-like element 104 between a second free end 9 and a second weakening line 10, the latter being made at the aforesaid access margin 102 of the second sheet-like element 104, and susceptible of being torn in order to remove the removable flap 8 from the second sheet-like element 104.

[0056] In addition, the second removable flap 8 is arranged superimposed on the second portion 6 of the closure flap 1 and in particular it is arranged to cover such second portion 6 in the first closure of the bag 100, as is better indicated hereinbelow with reference to the method for archiving/placing an article in such bag 100. Advantageously, moreover, the second removable flap 8 is superimposed on the closure flap 1 substantially between the first and the second folding line 11, 12. In this manner, in the first closure of the bag 100, the first portion 2 of the closure flap 1 is extended at least partially beyond the second free end 9 of the removable flap 8 and is susceptible of being folded around such second free end 9 until it is at least partially superimposed on the removable flap 8 in order to close the access opening to the containment volume of the bag 100.

**[0057]** Preferably, the removable flap 8 is made integrally with the second sheet-like element 104 and forms a continuation thereof.

**[0058]** In accordance with the preferred embodiment illustrated in the enclosed figures, the closure flap 1 substantially has rectangular shape and is extended for the entire length L of the bag 100. Preferably, moreover, the first free end 4 of the first portion 2, the first and the second adhesive strips 3, 7, the first weakening line 5, the first and the second folding lines 11, 12 are all parallel to each other and are extended for the entire length L of the bag

100.

**[0059]** In accordance with the preferred embodiment illustrated in the enclosed figures, the first and the second adhesive strips 3, 7 are made by depositing a continuous strip of adhesive material (e.g. glue) along the closure flap 1 of the bag 100, and such continuous strip of adhesive material can for example have rectangular shape.

**[0060]** Otherwise, in accordance with a different embodiment not illustrated in the enclosed figures, the first and the second adhesive strip 3, 7 can be made by depositing a discontinuous strip of adhesive material along the closure flap 1 of the bag 100, e.g. by depositing a series of glue drops aligned respectively along the first and the second adhesive strip 3, 7.

**[0061]** In accordance with the preferred embodiment illustrated in the enclosed figures, the removable flap 8 substantially has rectangular shape and is extended over the entire length L of the bag 100. Preferably, moreover, also the second free end 9 of the removable flap 8 and the second weakening line 10 are parallel to each other for the entire length L of the bag 100.

[0062] Naturally, the closure flap 1 and/or the removable flap 8 can also have shapes that are different from rectangular, without departing from the scope of the present patent. For example, they can also have trapezoidal shape, in which the external corners of such flaps 1, 8, interposed between their respective free ends 4, 9 and their lateral margins, are tapered; or they can have such external corners rounded. In this case, the adhesive strips, the weakening lines and the folding lines might not all be parallel to each other and they can be extended for lengths different from the length L of the bag 100.

**[0063]** In the enclosed figure 1, a preferred embodiment of the paper material bag 100, object of the present invention, is indicated, in which the second sheet-like element 104 has been underlined with a darker color with respect to the first sheet-like element 103, in order to better view the extension and borders thereof.

**[0064]** In addition, in the view of figure 1, the second sheet-like element 104 is placed in front of the first sheet-like element 103, with the first sheet-like element 103 that projects beyond the second sheet-like element 104 only with the first portion 2 of the closure flap 1.

**[0065]** In such preferred embodiment, in fact, the first folding line 11 substantially coincides with the first weakening line 5.

**[0066]** Preferably, moreover, the second free end 9 of the removable flap 8 is substantially superimposed on the first weakening line 5 of the first portion 2 of the closure flap 1. In addition, the second weakening line 10 of the removable flap 8 is preferably superimposed on the second folding line 12 of the closure flap 1. In other words, the free edge 102 of the second sheet-like element 104 is substantially superimposed on the free edge 102 of the first sheet-like element 103.

**[0067]** Advantageously, in accordance with the third embodiment described above, in which the first folding line 11 is interposed between the first weakening line 5

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and the first free end 4 of the closure flap 1, the removable flap 8 is superimposed on the second portion 6 of the closure flap 1 beyond the first weakening line 5 and is placed partially superimposed also on the first portion 2. In particular, in such third embodiment, the removable flap 8 is at most extended substantially up to the first folding line 11 of the first portion 2 of the closure flap 1, in order to allow the first portion 2 to be folded around the second free end 9 of the removable flap 8.

**[0068]** As indicated above, the removable flap 8 is superimposed on the second portion 6 of the closure flap 1 and protects it, for example, during the first opening of the bag 100.

[0069] In operation, in fact, in the first opening of the bag 100, a user who opens the bag 100 itself retains, with a first hand, the removable flap 8 and the second portion 6 and, with the other hand, pulls the first portion 2 away from the latter, thus tearing the first portion 2 along the first weakening line 5. Since, during such opening, the removable flap 8 is retained by the first hand of the user to cover the second portion 6, the latter is advantageously made thicker by the removable flap 8 and hence is less subject to being accidentally torn together with the first portion 2.

**[0070]** According to the preferred embodiment illustrated in figure 1, the bag 100 made of paper material, object of the present invention, also comprises a first protective strip 13 and a second protective strip 14 preferably made of siliconized paper, which are respectively placed to protect the first adhesive strip 3 and the second adhesive strip 7. In operation, the first and the second protective strip 13, 14 are susceptible of being respectively removed from the first and from the second adhesive strip 3, 7 before the first and second closure of the bag 100, so as to provide an adhesive material strip that is ready to be fixed

[0071] Preferably, the first portion 2 of the closure flap 1 is provided with a first reinforcement turn-up 15 extended along the first free end 4, and preferably along the entire first free end 4, and such first turn-up 15 is adapted to reinforce the first free end 4 itself, for example in order to prevent it from being accidentally torn.

**[0072]** Advantageously, the first reinforcement turn-up 15 is made by means of folding the first portion 2 of the closure flap 1 or by means of at least partial superimposition of a paper strip on the first portion 2 of the closure flap 1 itself.

[0073] Preferably, moreover, the removable flap 8 is provided with a second reinforcement turn-up 16 extended along its second free end 9, and preferably along the entire second free end 9, and such second turn-up 16 is adapted to reinforce the second free end 9 itself, for example in order to be prevent it from being accidentally torn. Advantageously, also the second reinforcement turn-up 16 is made by means of folding the removable flap 8 or by means of at least partial superimposition of a paper strip on the removable flap 8 itself.

[0074] The first turn-up 15 and the second reinforce-

ment 16 advantageously allow an easy grip respectively of the first portion 2 and of the removable flap 8, facilitating the opening of the bag 100 and the operation of tearing the removable flap 8.

[0075] In accordance with the embodiment indicated in the enclosed figures, the first portion 2 of the closure flap 1 is also provided with a covering sector 17, which advantageously is longitudinally extended for the entire length L of the bag 100 and is extended transversely between the first weakening line 5 and the first adhesive strip 3.

[0076] Advantageously, such covering sector 17 has transverse extension at least equal to the transverse extension of the removable flap 8, between the second free end 9 and the second weakening line 10, and is susceptible of being placed to cover the removable flap 8 with the first portion 2 of the closure flap 1 in the first closure of the bag 100. In other words, during first closure of the bag 100, the covering sector 17 is placed to cover the removable flap 8 and the first adhesive strip 3 is susceptible of being fixed to the second front element 104, in a position comprised between its access margin 102 and its constrained margin 101 opposite the access margin 102.

[0077] In accordance with an alternative embodiment, not illustrated in the enclosed figures, the first portion 2 of the closure flap 1 is not provided with the covering sector 17. In the latter embodiment, during the first closure of the bag 100, the first adhesive strip 3 is susceptible of being fixed to the second front element 104, in a position comprised between the access margin 102 and the second free end 9 of the removable flap 8. In other words, the first portion 2 of the closure flap 1 is susceptible of being fixed at the removable flap 8.

**[0078]** Also forming the object of the present invention is a method for archiving/placing an article in a bag of the above-described type and regarding which, for the sake of description simplicity, the same reference nomenclature will be employed.

**[0079]** Preferably, the archiving/placing method, object of the present invention, provides for a first step of inserting an article within the containment volume of the bag 100. According to the invention, the archiving/placing method comprises a first step of closing the bag 100 in which the first portion 2 of the closure flap 1 is folded along the first folding line 11, at least partially superimposed on the second sheet-like element 104 in order to close the access opening to the containment volume, as indicated in figure 5.

**[0080]** In accordance with the idea underlying the present invention, in such first step of closing the bag 100, the removable flap 8 is superimposed on the second portion 6 of the closure flap and is susceptible of being at least partially covered by the first portion 2, so as to be interposed between the aforesaid first and second portion 2, 6.

[0081] As indicated above, the first folding line 11 preferably coincides with the first weakening line 5. Conse-

quently, the first portion 2 is preferably folded along the first weakening line 5, as indicated in figure 5.

[0082] According to the invention, the archiving/placing method then comprises a first step of sealing the bag 100 in which the first adhesive strip 3 adheres to the second sheet-like element 104 in order to fix the first portion 2 of the closure flap 1 to the second sheet-like element 104. Before such first sealing step, the first adhesive strip 3 is advantageously made available by removing the first protective strip 13, placed to cover the first adhesive strip 3 itself.

**[0083]** In this manner, the article to be archived/placed is safely contained within the containment volume of the bag 100 and is advantageously ready to be mailed.

[0084] Advantageously, in accordance with the embodiment of the bag 100 illustrated in the enclosed images, in which the first portion 2 of the closure flap 1 is provided with the covering sector 17, the first portion 2 itself is fixed to the second sheet-like element 104 in an intermediate position between the access margin 102 of the second sheet-like element 104 and its constrained margin 101 opposite the access margin 102.

**[0085]** The archiving/placing method, object of the present invention, then provides for a first step of opening the bag 100, for example by the receiver of the bag 100 itself, so as to view the article at its interior.

**[0086]** In such first opening step, the first portion 2 of the closure flap 1 is torn along the first weakening line 5 in order to open the access opening to the containment volume of the bag 100 itself.

**[0087]** In operation, by acting on the first weakening line 5, it is possible to tear the first portion 2 of the closure flap 1, separating the first portion 2 from the remaining second portion 6 and opening the access opening to the containment volume of the bag 100.

**[0088]** In addition, in such first opening step, the first portion 2 is susceptible of being freed from the second sheet-like element 104, i.e. the first adhesive strip 3 is susceptible of being removed from the second sheet-like element 104 to which it had been fixed in the first sealing step, thus freeing the first portion 2.

**[0089]** Generally, a receiver who opens a bag of known type, in a step of opening such bag, acts on the folding line of the closure flap so as to tear along such folding line, since this is the weakest point of the bag.

**[0090]** However, even by acting along the folding line of the closure flap, it can happen that the user tears the bag not only along the folding line, but also along the sheet-like elements which delimit the containment volume of the bag itself, rendering it no longer usable in the future.

[0091] Advantageously, the archiving/placing method, object of the present invention, provides for closing the first portion 2 of the closure flap 1 by folding it along the first weakening line 5. In this manner, in the first step of opening the bag 100, the receiver who acts on the first folding line 11 in order to open the bag simultaneously acts on the first weakening line 5, which is more easily

torn with respect to a normal creasing, reducing the risk that the receiver who opens the bag 100 may also tear other parts of the bag 100 itself, rendering it no longer usable.

[0092] In addition, as indicated above, in the first opening step, a user who opens the bag 100 retains, with a first hand, the removable flap 8 and the second portion 6 and, with the other hand, pulls the first portion 2 away from the latter, thus tearing the first portion 2 along the first weakening line 5. In accordance with the present invention, moreover, the removable flap 8 is retained by the first hand of the user to cover the second portion 6. In this manner, the second portion 6 is advantageously made thicker by the removable flap 8 and is thus less subject to being accidentally torn together with the first portion 2. After the first step of opening the bag 100, the receiver can then extract the article that was archived/placed within the containment volume of the bag itself and view the same. If the article archived/placed in the bag 100 is not liked by the receiver, or if the latter wishes to newly use the bag 100 for mailing the same article or another one, it will suffice to insert the article within the containment volume of the bag 100 itself and close it as described hereinbelow.

**[0093]** The archiving/placing method, object of the present invention, thus provides for a second step of closing of the bag 100 in which the second portion 6 of the closure flap 1 is folded, along the second folding line 12, at least partially superimposed on the second sheet-like element 104 in order to newly close the access opening to the containment volume of the bag 100 itself, as indicated in the enclosed figure 7.

[0094] In addition, the present archiving/placing method provides for a second step of sealing the bag 100, following the aforesaid second closing step, in which the second adhesive strip 7 of the second portion 6 of the closure flap 1 adheres to the second sheet-like element 104 in order to fix the second portion 6 to the second sheet-like element 104 itself.

**[0095]** Before such second sealing step, the second adhesive strip 7 is advantageously made available by removing the second protective strip 14, placed to cover the second adhesive strip 7 itself.

[0096] Advantageously, in such second sealing step, the second portion 6 is fixed to the second sheet-like element 104 in an intermediate position between the access margin 102 of the second sheet-like element 104 and its constrained margin 101 opposite the access margin 102.

[0097] According to the idea underlying the present invention, after the first opening step and before the first closure step, the present archiving/placing method also comprises a step of removing the removable flap 8 in which the removable flap 8 is torn along the second weakening line 10 in order to allow the second portion 6 of the closure flap 1 to project beyond the second sheet-like element 104 and be folded along the second weakening line 12, at least partially superimposed on the second

sheet-like element 104 so as to execute the second closing step.

**[0098]** Indeed, as described above, the removable flap 8 is substantially superimposed on the second portion 6 of the closure flap 1, so as to protect such second portion 6 during the first step of opening the bag 100 and, more in detail, so as to protect the second adhesive strip 7 of the second portion 6.

[0099] In this manner, following the first step of opening the bag 100, the second portion 6 of the closure flap 1 does not project beyond the second sheet-like element 104 of the bag 100, and hence it cannot be folded to close the access opening to the containment volume of the bag 100 itself. Consequently, the removable flap 8 is removed before the second step of closing the bag 100, such that the second portion 6 projects beyond the second sheet-like element 104 and hence it can be folded, superimposed on the latter in order to close the access opening to the containment volume of the bag 100.

**[0100]** In accordance with the alternative embodiment, described above, in which the first portion 2 of the closure flap 1 is not provided with the covering sector 17, during the first closure the first portion 2 is fixed to the second sheet-like element 104 in an intermediate position between the access margin 102 of the second sheet-like element 104 itself and the second free end 9 of the removable flap 8. In other words, the first portion 2 is fixed at the removable flap 8.

**[0101]** In such alternative embodiment, the first step of opening the bag 100 substantially coincides with the step of removing the removable flap 8 itself.

**[0102]** Indeed, during the first opening step, the receiver who acts on the first weakening line 5, in order to free the first portion 2 from the second sheet-like element 104, simultaneously also acts on the second weakening line 10 of the removable flap 8, which is torn together with the first portion 2 that is fixed thereon.

**[0103]** Such alternative embodiment can nevertheless have the disadvantage that, in the first opening step, the receiver is unable to completely remove the removable flap 8, since the first adhesive strip 3 that fixes the first portion 2 of the closure flap 1 to the removable flap 8 can be torn or not remain perfectly fixed to the removable flap 8. In the latter case, the removing step only partially coincides with the first step of opening the bag 100 and it may be necessary to act a second time on the second weakening line 10 so as to completely remove the removable flap 8.

**[0104]** Consequently, in the opening step, by removing the first portion 2 of the closure flap 1, also the removable flap 8 is removed and the bag 100 remains with the second portion 6 of the closure flap 1 projecting beyond the access margin 102 of the second sheet-like element 104, ready to be folded along the second fold line 12 in the second closing step, as indicated in the enclosed figure 6. **[0105]** Advantageously, therefore, in such alternative embodiment of the bag 100, during the first closing step and in the first sealing step, the first portion 2 of the clo-

sure flap 1 is superimposed on and fixed to the removable flap 8, and during the second closing step the second portion 6 of the closure flap 1 is superimposed on the second sheet-like element 104.

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**[0106]** The present archiving/placing method then advantageously provides for a second step of opening the bag 100, in which a second receiver acts on the second folding line 12, tearing it and newly opening the access opening to the containment volume of the bag 100.

[0107] Following this second opening step, the bag 100 might no longer be usable for archiving/placing articles, since the closure flap 1 has been completely removed. Otherwise, the closure flap 1 may comprise other portions, separated from each other by other weakening lines other folding lines, along which the remaining portions of the closure flap 1 can be folded for other subsequent bag 100 closure steps.

**[0108]** The bag 100 made of paper material and archiving/placing method thus conceived therefore attain the pre-established objects.

#### **Claims**

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- Bag (100) made of paper material for archiving/placing articles, which comprises:
  - a first sheet-like element (103) and a second sheet-like element (104), superimposed and delimiting between them a containment volume of said bag (100) intended to contain articles to be archived/placed; each of said first and second sheet-like elements (103,104) being provided with:
    - at least three constrained margins (101), superimposed on and fixed to the corresponding three constrained margins (101) of the opposite sheet-like element (104, 103).
    - at least one access margin (102) superimposed on the corresponding access margin (102) of the opposite sheet-like element (104, 103), and such access margins (102) delimit between them an access opening to said containment volume;
  - a closure flap (1), projectingly extended from the access margin (102) of said first sheet-like element (103), and such closure flap (1) is susceptible of being folded, at least partially superimposed on said second sheet-like element (104), in order to close said access opening to said containment volume; said closure flap (1) being provided with:
    - a first portion (2) for a first closure of said bag (100), which is extended between a first

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free end (4) of said closure flap (1) and a first weakening line (5), and is provided with a first folding line (11), along which said first portion (2) is susceptible of being folded for the first closure of said bag (100), and with a first adhesive strip (3); said first portion (2) being susceptible of being torn along said first weakening line (5) in order to separate said first portion (2) from the closure flap (1) at a first opening of said bag (100);

- a second portion (6) for a second closure of said bag (100), which is extended between said first weakening line (5) and the access margin (102) of said first sheet-like element (103) and is provided with a second folding line (12), along which said second portion (6) is susceptible of being folded for the second closure of said bag (100), and with a second adhesive strip (7);

said bag (100) being **characterized in that** it is provided with a removable flap (8) projectingly extended from the access margin (102) of said second sheet-like element (104) between a second free end (9) and a second weakening line (10), the latter being made at said access margin (102) and susceptible of being torn in order to remove said removable flap (8) from said second sheet-like element (104); said removable flap (8) being arranged superimposed on the second portion (6) of said closure flap (1).

- 2. Bag (100) according to claim 1 characterized in that the first folding line (11) of the first portion (2) of said closure flap (1) is separate with respect to the second folding line (12) of the second portion (6) of said closure flap (1); wherein said first folding line (11) is positioned between the first free end (4) of said closure flap (1) and the second folding line (12) of said second portion (6).
- 3. Bag (100) according to claim 2 characterized in that the first folding line (11) of the first portion (2) of said closure flap (1) coincides with the first weakening line (5) of said first portion (2).
- 4. Bag (100) according to claim 2 or 3 characterized in that the second folding line (12) of the second portion (6) of said closure flap (1) coincides with the access margin (102) of said first sheet-like element (103).
- 5. Bag (100) according to any one of the preceding claims **characterized in that** said removable flap (8) is superimposed on said closure flap (1) substantially between said first folding line (11) and second folding line (12).

- 6. Bag (100) according to any one of the preceding claims **characterized in that** it comprises a first protective strip (13) and a second protective strip (14) respectively placed to protect said first adhesive strip (3) and said second adhesive strip (7).
- 7. Bag (100) according to any one of the preceding claims **characterized in that** the first portion (2) of said closure flap (1) is provided with a first reinforcement turn-up (15), extended along said first free end (4) to reinforce said first free end (4).
- 8. Bag (100) according to any one of the preceding claims **characterized in that** said removable flap (8) is provided with a second reinforcement turn-up (16), extended along said second free end (9) to reinforce said second free end (9).
- 9. Bag (100) according to any one of the preceding claims characterized in that the second free end (9) of said removable flap (8) is substantially superimposed on the first weakening line (5) of the first portion (2) of said closure flap (1).
- 10. Bag (100) according to any one of the preceding claims characterized in that the first portion (2) of said closure flap (1) is provided with a covering sector (17) transversely extended between said first weakening line (5) and said first adhesive strip (3), and such covering sector (17) has transverse extension at least equal to the extension of said removable flap (8) between said second free end (9) and said second weakening line (10), and is susceptible of being placed to cover said removable flap (8) with the first portion (2) of said closure flap (1) in said first closure.
- 11. Method for archiving/placing an article in a bag according to claim 1, and such method comprises:
  - a first step of closing said bag (100) in which the first portion (2) of said closure flap (1) is folded along said first folding line (11), at least partially superimposed on said second sheet-like element (104) in order to close said access opening to said containment volume;
  - a first step of sealing said bag (100) in which said first adhesive strip (3) adheres to said second sheet-like element (104) in order to fix the first portion (2) of said closure flap (1) to said second sheet-like element (104);
  - a first step of opening said bag (100) in which the first portion (2) of said closure flap (1) is torn along said first weakening line (5) in order to open said access opening to said containment volume:
  - a second step of closing said bag (100) in which the second portion (6) of said closure flap (1) is folded along said second weakening line (12),

at least partially superimposed on said second sheet-like element (104) in order to close said access opening to said containment volume;

- a second step of sealing said bag (100) in which said second adhesive strip (7) adheres to said second sheet-like element (104) in order to fix the second portion (6) of said closure flap (1) to said second sheet-like element (104);

said method being **characterized in that**, in said first step of closing, said removable flap (8) is superimposed on the second portion (6) of said closure flap (1), and **in that** it comprises, after said first step of opening and before said second step of closing, a step of removing said removable flap (8) in which said removable flap (8) is torn along said second weakening line (10) in order to allow the second portion (6) of said closure flap (1) to project beyond said second sheet-like element (104) and to be folded along said second weakening line (12), at least partially superimposed on said second sheet-like element (104) in said second step of closing.

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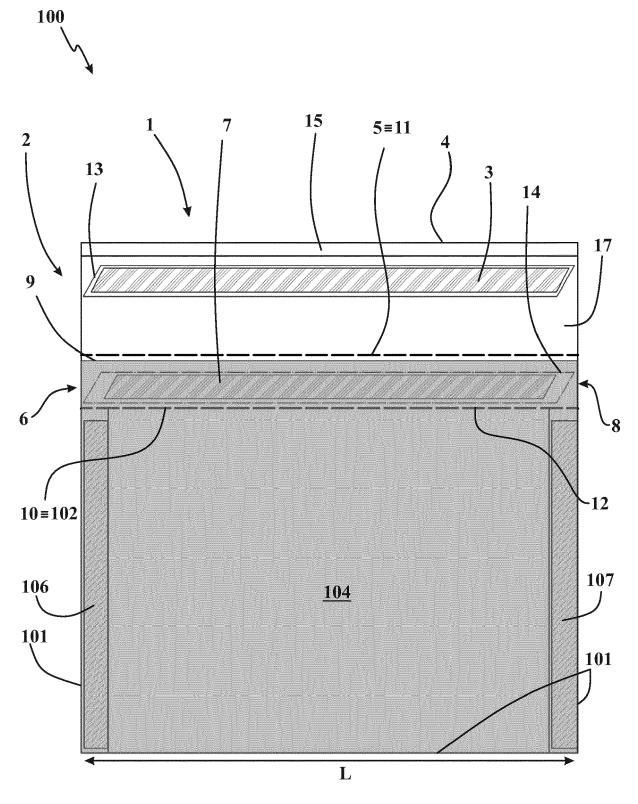
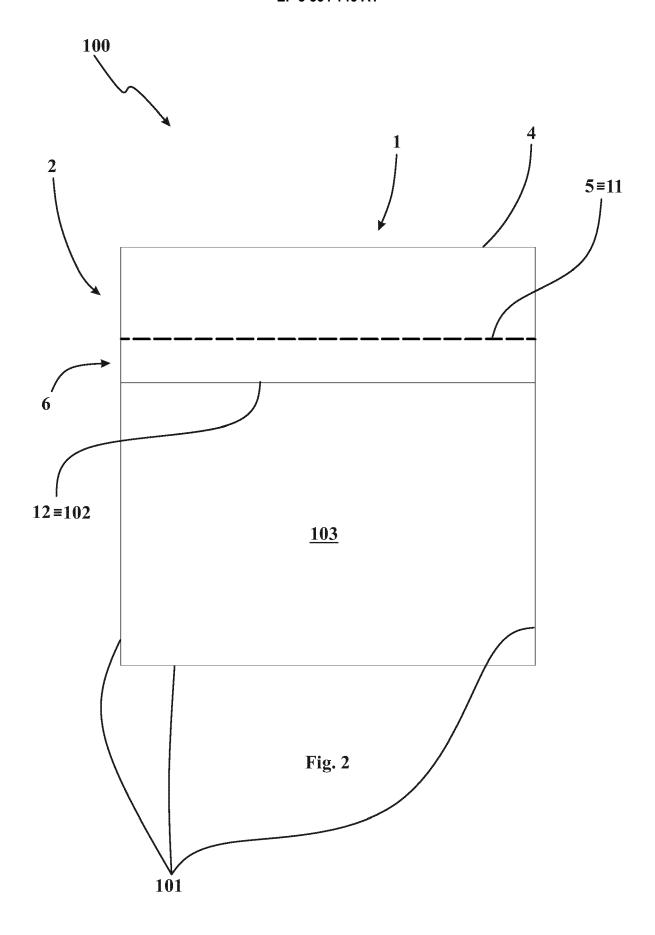
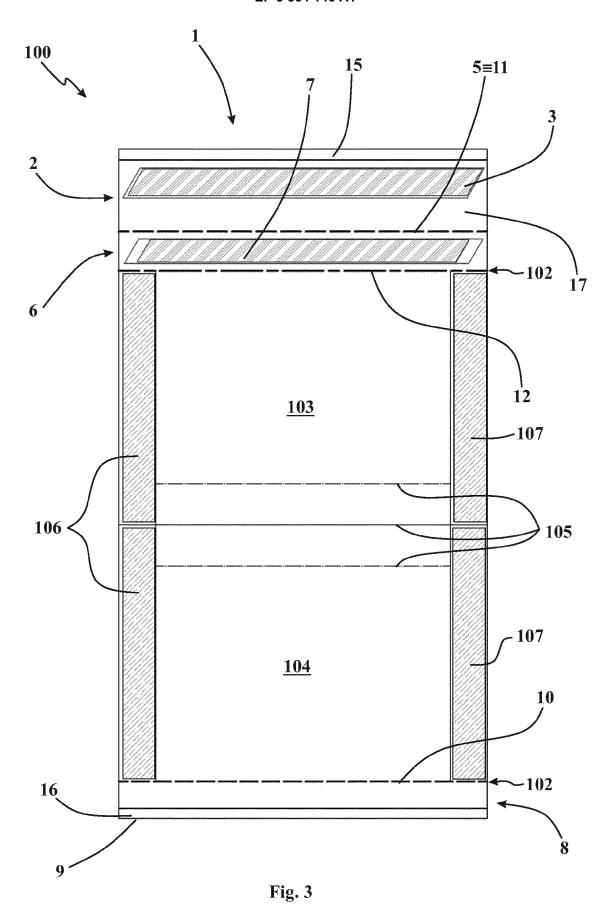


Fig. 1





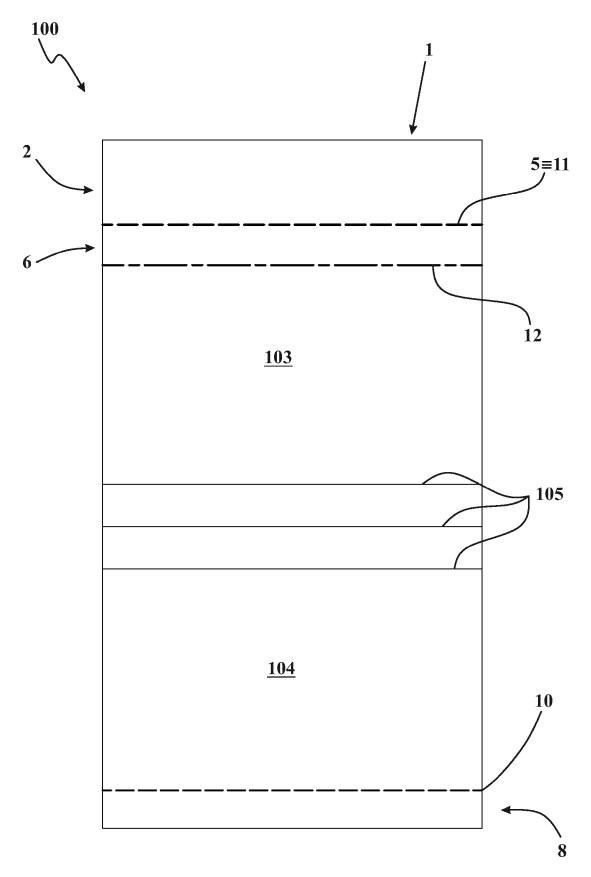


Fig. 4

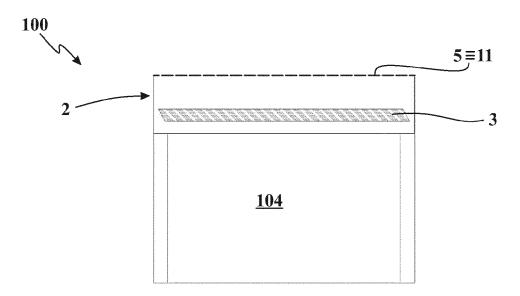


Fig. 5

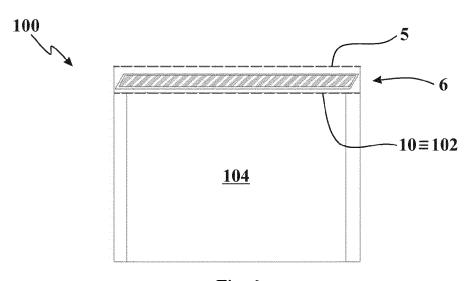
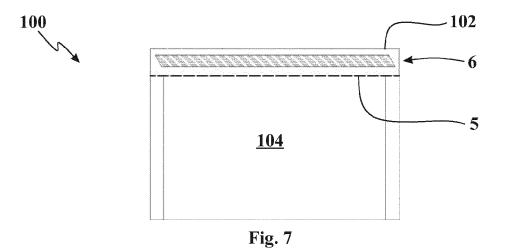


Fig. 6





#### **EUROPEAN SEARCH REPORT**

Application Number EP 19 17 1886

Category	Citation of document with inc	lication, where appropriate,	Relevant	CLASSIFICATION OF THE
Jaiegory	of relevant passaç	jes	to claim	APPLICATION (IPC)
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