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(54) A flat pack of solvent impregnated wipes

(57) A flat pack (2) of solvent impregnated wipes, which flat pack (2) comprises an inner bag (4) which contains the wipes, and an outer bag (6) which contains the inner bag (4), and the flat pack (2) being such that the wipes are impregnated with a solvent which is aggressive and which is for removing greases, oils and tars, the inner bag (4) is sealed to protect the outer bag (6) from the solvent, the outer bag (6) has a peelable resealable adhesive flap (8) which covers an opening (10) in the outer bag (6), and the inner bag (4) is accessible through the opening in the outer bag (6).

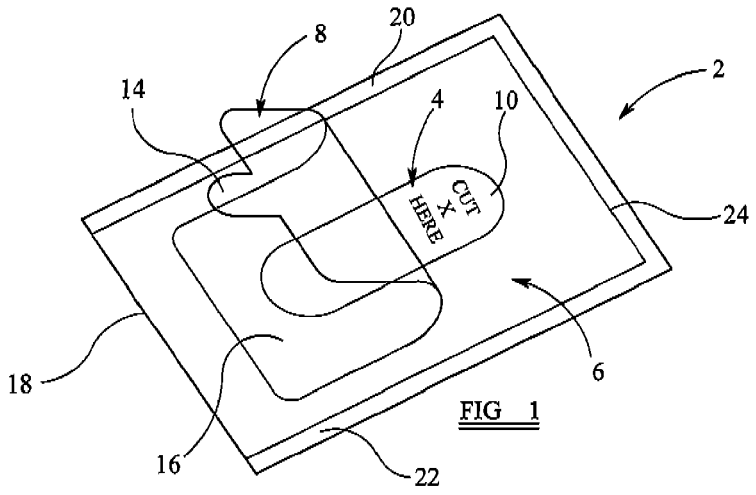

FIG 1

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Description

[0001] This invention relates to a flat pack of solvent impregnated wipes.

[0002] Flat packs of solvent impregnated wipes are known. They are often sold in supermarkets for domestic cleaning purposes. They comprise a pack of the solvent impregnated wipes contained in a bag. The bag has a peelable resealable adhesive flap which is peeled back to reveal an opening in the bag through which the wipes are obtained one at a time. After a wipe has been obtained, the flap is resealed to stop the remaining wipes in the bag from drying out.

[0003] For industrial applications where greases, oils and tars need to be removed, an aggressive solvent is required. The solvents employed in the known flat packs of solvent impregnated wipes are not sufficiently aggressive. A problem occurs if the solvent is made more aggressive. More specifically, the aggressive solvent attacks the adhesive on the resealable flap and destroys the adhesive in one or two days. Thereafter, the flap is unable to remain sealed so that the flat pack would have no effective shelf life.

[0004] It is an aim of the present invention to reduce the above mentioned problem.

[0005] Accordingly, in one non-limiting embodiment of the present invention there is provided a flat pack of solvent impregnated wipes, which flat pack comprises an inner bag which contains the wipes, and an outer bag which contains the inner bag, and the flat pack being such that the wipes are impregnated with a solvent which is aggressive and which is for removing greases, oils and tars, the inner bag is sealed to protect the outer bag from the solvent, the outer bag has a peelable resealable adhesive flap which covers an opening in the outer bag, and the inner bag is accessible through the opening in the outer bag.

[0006] The flat pack of solvent impregnated wipes of the present invention is firstly advantageous in that it is in the form of a flat pack. The flat pack is desirable for commercial purposes because it occupies little shelf space and is convenient to carry, as compared with putting wipes into a container such for example as a tin or a small bucket. Secondly, the flat pack of solvent impregnated wipes of the present invention is advantageous in that the sealed inner bag is able to protect the outer bag and its flap from the effects of the aggressive solvent on the adhesive of the flap. Thus the flat pack of solvent impregnated wipes is able to have a required shelf life. The shelf life may be, for example, in excess of one year. After the flat pack of solvent impregnated wipes has been sold, the inner bag is able to be opened in order to access the solvent impregnated wipes. For industrial purposes, the solvent impregnated wipes will usually be used up relatively quickly and within a few days. During this time, the flap is able to be resealed. This resealing of the flap together with the protection afforded by the inner bag even although it has been cut open, enables the solvent impregnated wipes to remain in a moist state for use for an acceptable period of time. The number of solvent impregnated wipes in the flat pack may be chosen so that, during normal use conditions, the wipes will be used up, and substantial numbers will not be left in the inner bag in a dried out state. Thus the flat pack of solvent impregnated wipes of the present invention is commercially acceptable for industrial use from a number of aspects.

[0007] The bag may be one in which the opening in the outer bag is formed by a cut in the outer bag. The cut may form an openable portion of the outer bag.

[0008] The flat pack may be one in which the cut forms the openable portion such that the openable portion has a part which remains connected to the outer bag whereby the openable portion remains attached to the outer bag when the openable portion has been opened. In this case, the cut may include at least one cut shape which forms a connecting portion which connects the openable portion to the outer bag. Preferably there are two of the cut shapes. The cut shapes are preferably curved cut shapes. Other types of cut shapes may be employed.

[0009] The flat pack may alternatively be one in which the cut bag forms the openable portion such that the openable portion is completely removed from the outer bag when the openable portion has been opened, and in which the flap includes at least one cut shape which forms a connecting portion which connects the flap to the outer bag. In this case, the cut shape may be located at an end portion of the flap such that when the flap is pulled open, the openable portion is completely removed from the outer bag before the connecting portion becomes operative. There may be two of the connecting portions. The cut may be an oval-shaped cut but other shapes for the cut may be employed. The connecting portion may be in the shape of a number six, but other shapes for the connecting portion may be employed.

[0010] The flat pack may alternatively be one in which the flap has a central portion containing material which is removed from the outer bag in order to form the opening in the outer bag.

[0011] Preferably, a part of the inner bag underneath the opening in the outer bag is provided with instructions for opening the inner bag. Preferably, the instructions are appropriate for forming an opening in the inner bag which is suitable for removing the wipes one at a time from the inner bag, and which is also suitable for partially resealing the opening in the inner bag after a wipe has been removed from the inner bag. This enables the inner bag to afford a degree of protection against premature drying out of wipes remaining in the inner bag. The required opening in the inner bag may be of an X-shape. Thus, for example, the instructions may be CUT X HERE. Other shapes for the opening in the inner bag may be used.

[0012] The flap may contain instructions for use and/or advertising material, so that the flap is then in the nature of a label.

[0013] The inner and outer bags may be made of the

same plastics material. Alternatively they may be made of different plastics materials. Any suitable and appropriate plastics materials may be employed.

[0014] Any suitable and appropriate solvent formulation for industrial use for removing greases, oils, tars and general shop soils may be employed. Any suitable and appropriate adhesive may be employed for sealing the flap. The adhesive may be that used for known flat packs of solvent impregnated wipes. The inner bag may be sealed by any suitable and appropriate means, including heat sealing, ultrasonic welding and adhesives. Edge seams for the outer bag may be formed using heat sealing, ultrasonic welding or adhesives.

[0015] Embodiments of the invention will now be described solely by way of example and with reference to the accompanying drawings in which:

Figure 1 shows a first flat pack of solvent impregnated wipes of the present invention and in a partially open condition;

Figure 2 is a plan view of the underneath of the peelable resealable adhesive flap shown in Figure 1;

Figure 3 is a side view of the peelable resealable adhesive flap shown in Figure 2;

Figure 4 is a top plan view of the flat pack shown in Figure 1 but without the removable resealable adhesive flap;

Figure 5 shows a second flat pack of solvent impregnated wipes of the present invention and in a closed condition; and

Figure 6 shows a third flat pack of solvent impregnated wipes of the present invention and in a closed condition.

[0016] Referring to Figures 1 - 4, there is shown a flat pack 2 of solvent impregnated wipes. The flat pack 2 comprises an inner bag 4 which contains the wipes, and an outer bag 6 which contains the inner bag 4. The flat pack 2 is such that the wipes are impregnated with a solvent which is aggressive and which is for removing greases, oils, tars and general shop soils.

[0017] The inner bag 4 is sealed to protect the outer bag 6 from the solvent. The outer bag 6 has a peelable resealable adhesive flap 8. The flap 8 covers an opening 10 in the outer bag 6. The inner bag 4 is accessible through the opening 10 in the outer bag 6.

[0018] As shown in Figures 1 and 4, a part of the inner bag 4 underneath the opening 10 in the outer bag 6 is provided with instructions for opening the inner bag 4 with an opening which is suitable for removing the wipes one at a time from the inner bag 4. The opening is advantageously also suitable for being partially resealed after a wipe has been removed from the inner bag 4. The envisaged opening in the inner bag 4 is of an X-shape, and it will thus be seen that the instructions are CUT X HERE.

[0019] As shown in Figures 2 and 3, the flap 8 has a central portion 12 containing material that is removed from the outer bag 6 in order to form the opening 10 in the outer bag 6. The flap 8 is provided with a tab 14 which is not provided with adhesive and which is available for enabling the flap 8 easily to be grasped, and the flap 8 peeled open to the position shown in Figure 1. The flap 8 may be provided on its upper surface 16 with instructions for use of the flat pack 2 and/or advertising material.

[0020] The outer bag 6 is formed by folding a length of material at a fold line 18. Sealed edges 20, 22, 24 are then formed. The sealed edges 20, 22, 24 may be formed using heat sealing, ultrasonic welding or appropriate adhesives. The opening 10 may be formed before the material for the outer bag 6 is folded about the fold line 18. The inner bag 4 may be formed in the same manner as the outer bag 6, except that the inner bag 4 will not provided with the opening 10.

[0021] The flat pack 2 may have a shelf life in excess of one year. The inner bag 4 may be provided with twenty four or twenty five of the wipes. This number of wipes is chosen so that the wipes will be used up relatively quickly during normal industrial use, and there will not be a large number of residual wipes likely to dry out and remain in the inner bag 2 after the inner bag 2 has been opened.

[0022] Figure 5 shows a flat pack 26 of solvent impregnated wipes. Similar parts as in previous Figures have been given the same reference numerals for ease of comparison and understanding. In the flat pack 26, the opening 10 in the outer bag 6 is formed by a cut 28 in the outer bag 6. The cut 28 forms an openable portion 30 of the outer bag 6. The cut 28 forms the openable portion 30 such that the openable portion 30 has a part 32 which remains connected to the outer bag 6, whereby the openable portion 30 remains attached to the outer bag 6 when the openable portion 30 has been opened. The cut 22 includes two cut shapes 34 which connect the openable portion 30 to the outer bag 6. The cut shapes 34 are curved cut shapes which look like inverted figure numbers six as can be appreciated from Figure 5.

[0023] The cut 28 is an incomplete cut in the outer bag 6. The flap 8 is placed over the cut 28. The flap 8 has an extremely aggressive adhesive. When the flap 8 is pulled back, this causes the outer bag 6 to partially open along the lines of the cut 28, thereby revealing the entry point of the outer bag 6 which allows access to the inner bag 4. Due to the aggressive nature of the adhesive employed on the flap 8, substantial force is required to pull back the flap 8. This force has to be carefully applied in order not to cause the cut shapes 34 in the cut 28 to break, which may result in a ripping of the outer bag 6 and spilling of the contents of the outer bag 6. Care in the application of the force also needs to be taken in order to avoid complete separation of the flap 8 from the outer bag 6, in cases where this should not be desired. If the adhesive used is too aggressive, then a less aggressive adhesive can be employed.

[0024] Figure 6 shows a flat pack 36 which does not suffer from the above mentioned problems associated with Figure 5 when an extremely aggressive adhesive is

used. In Figure 6, similar parts as in previous Figures have been given the same reference numerals for ease of comparison and understanding.

[0025] The flat pack 36 is one in which the cut 28 is such that the openable portion 30 is completely removed from the outer bag 6 when the openable portion 30 has been opened. Also, it is the flap 8 which includes the two cut shapes 34, rather than the outer bag 6 as in the flat pack 26. In the flat pack 36, the cut shapes 34 form a connecting part 32 which connect the flap 8 to the outer bag 6. The cut shapes 34 are located at an end portion of the flap 8 such that when the flap 8 is pulled open, the openable portion 30 is completely removed from the outer bag 6 before the connecting part 32 becomes operative. As can be seen from Figure 6, the cut 28 is an oval-shaped cut, and the two cut shapes 34 are each in the shape of a number six, although the cut shapes 34 in Figure 6 extend in a different direction to the cut shapes 34 in Figure 5.

[0026] The flat pack 36 is such that, when the flap 8 is pulled open, a clean single-pull removal of the flap 8 beyond the oval cut-out afforded by the cut 28 is able to be achieved. The cut shapes 34 form anchors which secure the flap 8 just below the cut 28 as viewed in Figure 6. This prevents disconnection of the flap 8 from the outer bag 6, in spite of forces required to overcome the adhesive employed on the flap 8, irrespective of whether or not the adhesive is an extremely aggressive adhesive, or a less aggressive adhesive. Thus the flat pack 36 is such that the outer bag 6 is not torn by the application of too much force. Also, the flap 8 does not become disconnected from the outer bag 6. The use of the adhesive further takes care of the possibility of the oval cut-out formed by the cut 28 disconnecting from the outer bag 6. More specifically, the adhesive retains the oval cut-out to the inner surface of flap 8. In all embodiments of the invention, the flap 8 may be regarded as a label.

[0027] It is to be appreciated that the embodiments of the invention described above with reference to the accompanying drawings have been given by way of example only and that modifications may be effected. Thus, for example, the inner and outer bag 4, 6 can be made of any suitable and appropriate plastics materials. Flat packs containing small quantities of the solvent impregnated wipes may be dispensed from dispensing machines in factories, thereby reducing stores and inventory costs. Individual components shown in the drawings are not limited to use in their drawings and they may be used in other drawings and in all aspects of the invention.

Claims

1. A flat pack of solvent impregnated wipes, which flat pack comprises an inner bag which contains the wipes, and an outer bag which contains the inner bag, and the flat pack being such that the wipes are impregnated with a solvent which is aggressive and which is for removing greases, oils and tars, the inner bag is sealed to protect the outer bag from the solvent, the outer bag has a peelable resealable adhesive flap which covers an opening in the outer bag, and the inner bag is accessible through the opening in the outer bag.

2. A flat pack of solvent impregnated wipes according to claim 1 in which the opening in the outer bag is formed by a cut in the outer bag.

3. A flat pack of solvent impregnated wipes according to claim 2 in which the cut forms an openable portion of the outer bag.

4. A flat pack of solvent impregnated wipes according to claim 3 in which the cut forms the openable portion such that the openable portion has a part which remains connected to the outer bag whereby the openable portion remains attached to the outer bag when the openable portion has been opened.

5. A flat pack of solvent impregnated wipes according to claim 4 in which the cut includes at least one cut shape which forms a connecting portion which connects the openable portion to the outer bag

6. A flat pack of solvent impregnated wipes according to claim 5 in which there are two of the cut shapes.

7. A flat pack of solvent impregnated wipes according to claim 6 in which the cut shapes are curved cut shapes.

8. A flat pack of solvent impregnated wipes according to claim 3 in which the cut forms the openable portion such that the openable portion is completely removable from the outer bag when the openable portion has been opened, and in which the flap includes at least one cut shape which forms a connecting portion which connects the flap to the outer bag.

9. A flat pack of solvent impregnated wipes according to claim 8 in which the cut shape is located at an end position on the flap such that when the flap is pulled open, the openable portion is completely removed from the outer bag before the connecting portion becomes operative.

10. A flat pack of solvent impregnated wipes according to claim 9 in which there are two of the connecting portions.

11. A flat pack of solvent impregnated wipes according to any one of claims 8 - 10 in which the cut is an oval-shaped cut.

12. A flat pack of solvent impregnated wipes according

to any one of claims 8 - 11 in which the connecting portion is in the shape of a number six.

13. A flat pack of solvent impregnated wipes in according to claim 1 in which the peelable resealable adhesive flap has a central portion containing material which is removed from the outer bag in order to form the opening in the outer bag.

14. A flat pack of solvent impregnated wipes according to any one of the preceding claims and in which a part of the inner bag underneath the opening in the outer bag is provided with instructions for opening the inner bag.

15. A flat pack of solvent impregnated wipes in which the peelable resealable adhesive flap contains instructions for use and/or advertising material.

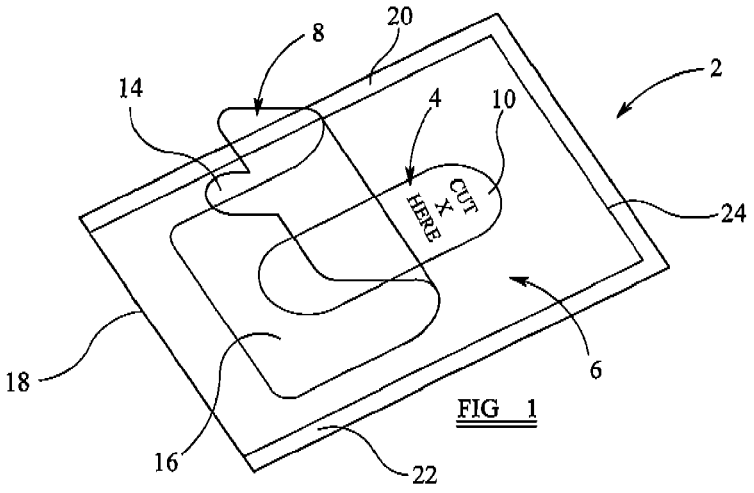

FIG 1

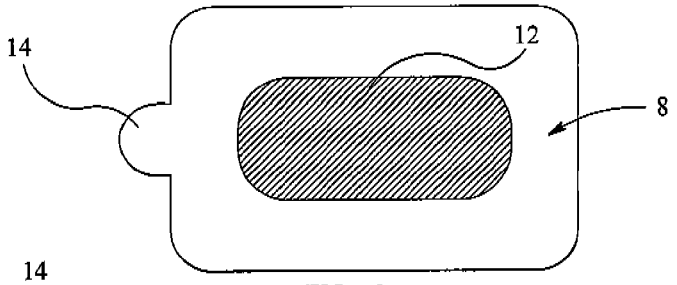

FIG 2

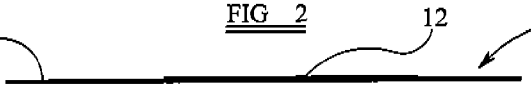

FIG 3

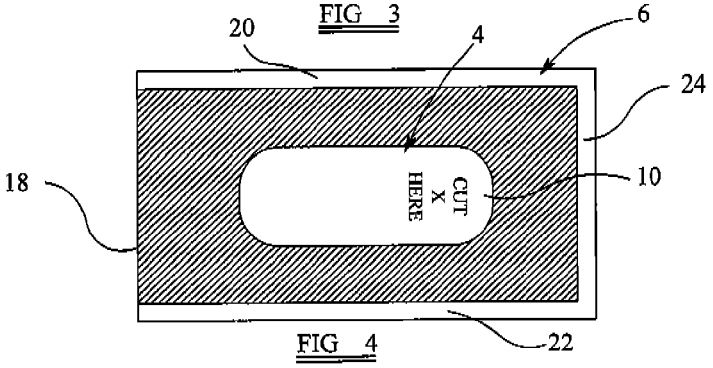

FIG 4

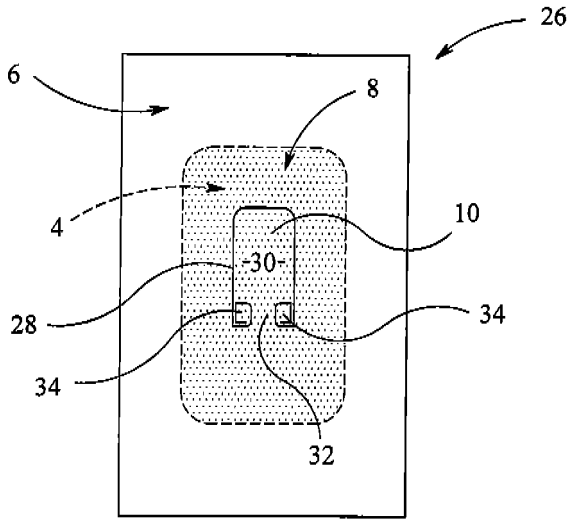

FIG 5

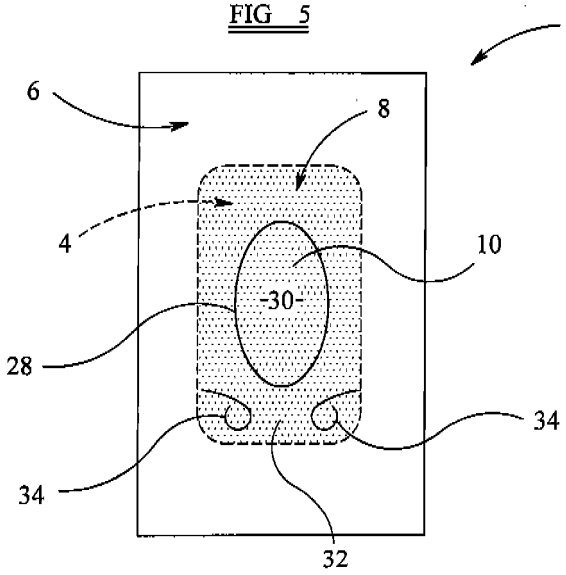

FIG 6

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EUROPEAN SEARCH REPORT

Application Number
EP 11 25 0126

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X A	GB 2 462 150 A (O'BRIEN JAMES AIDEN [IE]) 3 February 2010 (2010-02-03) * page 4, line 5 - page 6, line 9; figures 1-4 * -----	1-5,7, 11,14,15 6,8-10, 12,13	INV. A47L13/17
			TECHNICAL FIELDS SEARCHED (IPC) A47L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	18 October 2011	Blumenberg, Claus

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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
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& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 11 25 0126

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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18-10-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82