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Description

This invention relates to labels, for example labels for containers for horticultural or photographic chemicals in respect of which there is a need, not only for an identification of the contents of the containers, but also for somewhat detailed instructions for use or the like.

In the past, various kinds of folded labels, tear-off information sheets and the like have been proposed to meet this need, as well as the simple expedient of attaching a separately formed sheet of instructions to a container, for example by an encircling rubber band or the like. However, these prior proposals have had the disadvantage of requiring excessive manual labour, or of making it difficult, once the leaflet or the like containing the instructions has been consulted, to keep the instructions thereafter conveniently with the container for future reference.

EP0043179A discloses a label in which a multi-folded instruction strip is stuck to a separately formed backing sheet along a free edge of an outer panel of the instruction strip and the inwardly presented edge portion of a further panel connected with said outer panel along a fold line adjacent which said edge portion lies. The outer panel can be torn along a tear line adjacent said free edge to allow access to the remainder of the folded instruction strip which can, in turn, when no longer required, be torn away along a tear line adjacent said edge portion to leave the base sheet still in place. However, there is no reliable means of re-attaching the outer panel after it has been torn adjacent its free edge and thus it is difficult to keep the folded instruction sheet stowed neatly on a container or the like to which the label is applied, for future reference once the instructions have been consulted.

Furthermore the application of adhesive to separate parts of a folded but otherwise unsecured instruction sheet and the application of such folded and adhesive-coated instruction sheets to separately formed backing sheets presents difficulties for automatic production.

U.S. 4128954 discloses a label for containers of medicines, which is applied in an unfolded condition but which is divided into areas containing different categories of information, some of these areas being adapted to be torn from the remainder for application to record sheets or the like, different said areas being free from adhesive or provided with adhesive coatings of different types. The labels are produced by cutting from a continuous strip to which the respective adhesives, etc. are applied before the individual labels are severed from the strip.

EP0087987 published 7th September 1983 comprising a strip which is folded over on itself a number of times to form a flattened coil of which an outer panel is stuck along its free edge to base sheet to which the innermost panel of the flat 'coil', connected by a fold line with the outer panel, is also stuck. The base sheet in turn is coated with adhesive to allow it to be stuck to a

container. However, where a re-usable adhesive applied directly to the strip is used to stick down the free edge of the outer panel, difficulties again arise in manipulation of folded strips bearing active adhesive.

It is an object of the present invention to provide an improved label by which the above-noted disadvantages may be avoided.

According to one aspect of the invention there is provided a label comprising a band of sheet material, the band having respective fold lines extending widthwise of the band and formed by folding the band transversely, the band comprising a plurality of panels defined between said fold lines whereby the panels are connected end to end along respective said fold lines extending widthwise of the band, said panels including a first panel, a second panel connected via a first of said fold lines with one end of the first panel, and means connecting said second panel, along its edge remote from said first fold line, with a part of the band of sheet material other than said second panel, characterised in that said means connecting said second panel along its edge remote from said first fold line with said part of the band of sheet material, includes a removable self-adhesive strip, and a permanently tacky contact adhesive on said strip, whereby the second panel can be temporarily detached from, and subsequently reaffixed to, said part of the band other than said second panel, and in that the label further comprises a base sheet having a layer of permanently tacky contact adhesive on one face of said base sheet and said first panel being permanently adhesively secured to said base sheet on the other face of said base sheet.

An embodiment of the invention is described below with reference to the accompanying drawings in which:—

FIGURE 1 is a plan view of a label embodying the invention in a folded condition,

FIGURE 2 is a plan view of the label in an unfolded condition,

FIGURE 3 is a schematic end elevation view of the label of Figures 1 and 2 attached to a release sheet, and

FIGURE 4 illustrates a strip of release paper with a plurality of labels such as shown in Figures 1 and 3 attached thereto, for supply to an automatic labelling machine.

Referring to the drawings, a label comprises an elongate rectangular band of paper divided, by transversely extending fold lines, into a plurality of panels. Thus, the band comprises a first panel 10 connected via a first fold line 12 with a second panel 14 affording one end of the strip, the panel 10 being connected, via a second fold line 16, with a section of the band which affords the other end of the band and which, in the example shown, comprises a third panel 18, connected with the panel 10 via the fold line 16, a panel 20 connected with the panel 18 via a fold line 19 and a panel 22 connected with the panel 20 via a fold line 21.

In the folded condition of the label, the panel 20 is folded about fold line 19 onto the panel 18, the

panel 22 is folded about fold line 21 onto the panel 20, and the panel 18, with the panels 20 and 22 folded against it, is folded over onto the panel 10, so that the panels 20 and 22 lie between the panel 18 and the panel 10. The panel 14 is then folded about the fold line 12 onto the panel 18, as shown in Figure 3, so that the panels 18, 20 and 22 are disposed between the panels 10 and the panel 14. The panel 14 is then secured adjacent its free edge, to the portion of the panel 18 which adjoins the fold line 16, by means of an adhesive strip 23 superimposed on the panels 14 and 18 to overlap the free edge of the panel 14, the strip 23 having, on its side engaging the panels 14 and 18, a coating of permanently tacky, pressure-sensitive adhesive.

The panels 14, 18, 20 and 22, and the portion of panel 10 which faces toward the panels 18, 20 and 22, in the folded condition of the label conveniently comprise respective parts of a single strip of paper, while the face of panel 10 which faces away from the panels 18, 20 and 22 in the folded condition of the label is afforded by a separately formed support piece of paper, 10a, (see Figure 3), which is permanently stuck to the strip of paper providing the panels 14, 18, 20 and 22. The piece of paper 10a carries, on its face facing away from said strip of paper, a coating of a pressure sensitive, permanently tacky adhesive by means of which, in use, the label is applied to a container or the like. Each piece of paper 10a may thus have the form which is already known for self-adhesive labels *per se*.

In manufacture of the labels it is, in fact, much easier to provide, in known manner, a series of pieces of paper 10a, coated with said adhesive and temporarily supported, on their adhesive coated sides, by a strip of release paper, and to paste the already folded and retained (by strips 24) paper strips to the pieces 10a, for example by passing said strip of release paper, with the pieces 10a thereon, longitudinally through a machine which applies paste to the pieces 10a in succession, whilst they are supported on the release strip, and then applies the folded strips affording panels 14, 18 etc. to the pasted pieces 10a in succession. Alternatively, of course, such a machine may apply paste to the folded strips prior to affixing the folded strips to their respective pieces 10a in succession as the release strip passes through the machine. The forming and folding of the paper strip is much facilitated by the provision of the separate securing strip 23.

Figure 4 shows a series of similar labels such as shown in Figure 1 to 3 secured to a strip of release paper 24. In use, the strip 24, for example wound into a roll, is supported in a labelling machine and is fed longitudinally into the machine which operates to apply the labels one after the other to successive containers or the like to be labelled.

In manufacture of the labels, the paper strips which afford the panels 14, 18, 20 and 22 and the upper portion of the panel 10 are appropriately printed, then folded and secured by their strips 23, then adhesively secured to the pieces 10a

already supported on their release strip 24. The face of the panel 14 which is presented outwardly in the folded condition of the label as viewed in Figure 1 is printed, for example, with material identifying the contents of a container to which the label is to be applied, whereas the outer face of the panel 10 and either or both faces of the panels 18, 20 and 22 are printed with, for example, instructions for use of the product in the container or the like.

The purchaser of the container or the like having the label applied thereto, when he wishes to consult the instructions embodied in the label, simply peels off the strip 23 and unfolds the panels 18, 20 and 22 to consult the instructions. He may thereafter re-fold the strip to its original condition and re-apply the strip 23 so that the instructions are still retained in the label, with the container, as a neat package.

If desired, at tear line, for example a line of perforations, may be provided at the junction of the panel 18 with the panel 10 to allow the instructions or the like printed on panels 18 to 22 to be torn off, or such a tear line may be provided between any of the panels 19 to 22 and the adjoining panel to allow the respective portion of the label to be torn off.

It will be appreciated that sundry variants of the label disclosed with reference to the drawings are possible. For example, the panels 20 and 22 may be omitted, if the surface of panels 10 and 18 and the reverse surface of panel 14 are sufficient for the instructions or the like. Indeed, the panel 18 may be omitted, and the panel 14, when folded over, simply affixed by the strip 23 to the outwardly presented face of the panel 10.

Claims

1. A label comprising a band of sheet material, the band having respective fold lines (12, 16, 19, 21) extending widthwise of the band and formed by folding the band transversely, the band comprising a plurality of panels (10, 14, 18, 20, 22) defined between said fold lines whereby the panels are connected end to end along respective said fold lines extending widthwise of the band, said panels including a first panel (10), a second panel (14) connected via a first (12) of said fold lines with one end of the first panel, and means (23) connecting said second panel, along its edge remote from said first fold line, with a part of the band of sheet material other than said second panel, characterised in that said means connecting said second panel (14) along its edge remote from said first fold line (12) with said part of the band of sheet material, includes a removable self-adhesive strip (23), and a permanently tacky contact adhesive on said strip, whereby the second panel (14) can be temporarily detached from, and subsequently reaffixed to, said part (18) of the band other than said second panel, and in that the label further comprises a base sheet (10a) having a layer of permanently tacky contact adhesive on one face of said base sheet and said

first panel being permanently adhesively secured to said base sheet on the other face of said base sheet.

2. A method of manufacturing labels according to claim 1, comprising providing a plurality of pieces of sheet material, constituting base sheets (10a) coated on their one sides with pressure sensitive, permanently tacky adhesive, arranged in series along a release strip and temporarily stuck thereto by said one face thereof, conveying said release strip with said base sheets thereon, longitudinally and sticking to said other faces of the support pieces in succession, respective said folded bands of sheet material, each secured by a respective removable self-adhesive strip.

3. A method according to claim 2 wherein the exposed said other faces of the base sheets (10a) are coated with gum or paste as they pass, on the release strip, a pasting station, and said folded bands are applied thereto as they pass, on the release strip, through the pasting station.

4. A method according to claim 2 wherein said folded bands are first coated with paste or adhesive on the portions of the respective bands to be stuck to said base sheets and are subsequently applied to said base sheets whilst the latter are still stuck to said release strip.

Patentansprüche

1. Etikett, das einen Streifen aus Blattmaterial umfaßt, wobei der Streifen jeweils Falzlinien (12, 16, 19, 21) aufweist, die sich über die Breite des Streifens erstrecken und durch Querfalten des Streifens gebildet werden, wobei der Streifen mehrere Felder (10, 14, 18, 20, 22) umfaßt, die zwischen besagten Falzlinien festgelegt sind, wodurch die Felder entlang der jeweiligen besagten Falzlinien, die sich über die Breite des Streifens erstrecken, end-zu-end-verknüpft sind, wobei besagte Felder ein erstes Feld (10), ein zweites Feld (14), über eine erste (12) der besagten Falzlinien mit einem Ende des ersten Feldes verbunden, und Mittel (23) einschließt, die besagtes zweites Feld entlang seiner von besagter erster Falzlinie entfernten Kante mit einem anderen Teil des Streifens aus Blattmaterial als besagtem zweiten Feld verbinden, dadurch gekennzeichnet, daß besagte Mittel, die besagtes zweites Feld (14) entlang seiner von besagter erster Falzlinie (12) entfernten Kante mit besagtem Teil des Streifens aus Blattmaterial verbinden, einen entfernbaren selbstklebenden Streifen (23) und einen dauerklebenden Kontaktklebstoff auf besagtem Streifen einschließt, wodurch das zweite Feld (14) zeitweise von besagtem anderen Teil (18) des Streifens als besagtem zweiten Feld abgelöst und anschließend wieder daran befestigt werden kann, und daß das Etikett weiter ein Basisblatt (10a) umfaßt, das eine Schicht von dauerklebendem Kontaktklebstoff auf einer Seite besagten Basisblattes aufweist, wobei besagtes erstes Feld dauerhaft klebend an besagtem Basisblatt auf der anderen Seite des Basisblattes festgemacht ist.

2. Verfahren zum Herstellen von Etiketten nach

Anspruch 1, umfassend das Zurverfügungstellen mehrerer Stücke aus Blattmaterial, die die Basisblätter (10a) bilden, auf ihren einen Seiten mit druckempfindlichem, dauerklebenden Klebstoff beschichtet, in Reihen entlang eines Abziehstreifens angeordnet und zeitweise daran mit deren besagter einer Seite angeklebt, das Vorwärtsbewegen besagten Abziehstreifens mit besagten Basisblättern darauf in Längsrichtung und das Kleben besagter gefalteter Streifen aus Blattmaterial, von derin jeder jeweils mit einem entfernbaren selbstklebenden Streifen befestigt ist, aufeinanderfolgend jeweils auf besagte andere Seiten der Trägerstücke.

3. Verfahren nach Anspruch 2, wobei die besagten anderen freien Seiten der Basisblätter (10a) mit Gummi oder Leim beschichtet werden, wenn sie auf dem Abziehstreifen eine Verleimungsstation durchlaufen, und besagte gefaltete Streifen auf sie aufgebracht werden, wenn sie auf dem Abziehstreifen durch die Verleimungsstation laufen.

4. Verfahren nach Anspruch 2, wobei besagte gefaltete Streifen zuerst mit Leim oder Klebstoff jeweils auf den Teilen der Streifen beschichtet werden, die auf besagte Basisblätter geklebt werden sollen, und anschließend auf besagte Basisblätter aufgebracht werden, während die letzteren noch auf besagtem Abziehstreifen kleben.

Revendications

1. Une étiquettes comprenant une bande de matière en feuille, la bande comportant des lignes de pliage respectives (12, 16, 19, 21) s'étendant dans le sens de la largeur de bande et formées par pliage de la bande transversalement, la bande comprenant une pluralité de panneaux (10, 14, 18, 20, 22) définis entre lesdites lignes de pliage de telle sorte que les panneaux soient reliés bout à bout le long desdites lignes de pliage respectives s'étendant dans le sens de la largeur de la bande, lesdits panneaux comprenant un premier panneau (10), un second panneau (14) relié par l'intermédiaire d'un première (12) desdites lignes de pliage avec une extrémité du premier panneau et un moyen (23) reliant ledit second panneau, le long de son bord éloigné de ladite première ligne de pliage, avec une partie de la bande de matière en feuille que ledit second panneau, caractérisée en ce que ledit moyen reliant ledit second panneau (14) le long de son bord éloigné de ladite première ligne de pliage (12) avec ladite partie de la bande de matière en feuille comprend une bande auto-adhésive amovible (23), et un adhésif collant en permanence prévu sur ladite bande de manière que le second panneau (14) puisse être détaché temporairement de, et refixé ultérieurement sur, ladite partie (18) de la bande autre que ledit second panneau, et en ce que l'étiquette comprend outre une feuille de base (10a) portant sur une face une couche d'adhésif collant en permanence, et ledit premier panneau étant fixé par adhésif collant en permanence sur l'autre face de ladite feuille de base.

2. Une procédé de fabrication d'étiquettes selon la revendication 1, consistant à former une pluralité d'éléments de matière en feuilles, constituant des feuilles de base (10a), revêtues sur une de leur face avec un adhésif sensible à la pression et collant en permanence, disposées en série le long d'une bande anti-adhésive et collées temporairement sur celle-ci, par l'une de leurs faces précitées, à transporter longitudinalement ladite bande anti-adhésive portant lesdites feuilles de base et à coller successivement sur lesdites autres faces des éléments de support lesdites bandes pliées respectives de matière en feuilles, chacune étant fixée par un ruban auto-adhésif amovible respectif.

3. Une procédé selon la revendication 2, dans lequel lesdites autres faces exposées des feuilles de base (10a) sont revêtues de gomme ou d'enduit lorsqu'elles passent sur le ruban anti-adhésif dans une station d'enduction, et lesdites bandes pliées sont mises en place sur celle-ci quand elles passent sur le ruban anti-adhésif dans la station d'enduction.

4. Un procédé selon la revendication 2, dans lequel lesdites bandes pliées sont d'abord revêtues de pâte ou d'adhésif sur les parties des bandes respectives à coller sur lesdites feuilles de base et elles sont ensuite placées sur lesdites feuilles de base pendant que ces dernières sont encore collées sur ledit ruban anti-adhésif.

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