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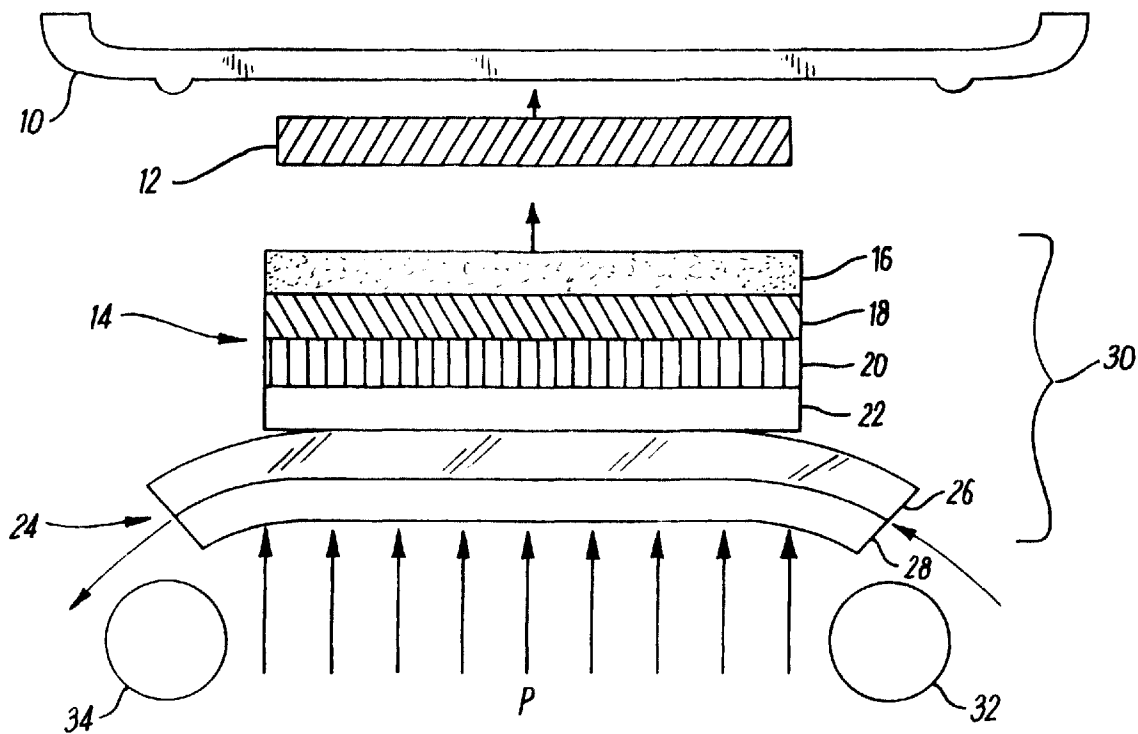
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(54) Labelling process

(57) A labelling process comprises a first step of attaching a first label (12) substantially permanently to a substrate (10). Thereafter, the process comprises a second step of attaching a second label (14) to the sub-

strate. The attachment of the second label (14) is such that it can be removed from the substrate (10). When attached, the second label (14) substantially conceals the first label (12).



## Description

This invention relates to labelling processes.

In the beer and other industries, certain products only have a limited season, for example christmas ale at christmas time. This can cause a problem in the crating of bottles of such products. This means that the bottles have to be crated in unmarked crates, in crates provided with a permanent label relating to the product, or in crates labelled for a different product. Each of these alternatives is unsatisfactory.

According to this invention there is provided a labelling process comprising a first step of applying a first label relatively permanently to a substrate and thereafter a second step of applying a second label to the substrate such that the second label can be removed from the substrate, wherein, when the second label is so attached, the second label substantially conceals the first label.

The first and second labels can be any printed indicator means applied to the substrate, and the term applying a label is intended to include within its meaning printing directly onto the substrate, as well as printing onto other matter before said other matter is applied to the substrate.

Preferably, the first label is applied to the substrate by a permanent printing process, for example screen printing.

The second label is conveniently in the form of a transfer.

The step of applying the second label may be by attaching the second label to the substrate, which is preferably such that it can be removed from the substrate after application thereto without removing the first label. The removal of the second label is conveniently effected by an appropriate washing process, which may involve directing at the second label, for example by hosing or spraying, appropriate fluid, such as water.

The second step may comprise attaching the second label to the substrate by a transfer printing process, in order to conceal the first label.

The substrate may be a container, such as a crate for holding vessels of a drink, for example bottles or cans of an alcoholic or soft drink, such as beer, lager, cider, wine mineral water, fruit juice, lemonade, or the like.

The second step may include the further steps of providing a label carrier assembly comprising the second label and a carrier carrying the second label, applying the assembly to the substrate to attach the second label to the substrate, and thereafter removing the carrier from the second label to leave the second label attached to the substrate.

Preferably, the second label comprises an adhesive layer to enable the second label to be attached to the substrate.

The adhesive layer may comprise a pressure sensitive adhesive whereby when the carrier assembly is applied to the substrate, the application of pressure to

the carrier assembly attaches the second label to the substrate. The carrier assembly may or may not be heated prior to its attachment to the substrate.

The second label may comprise a plurality of layers including the adhesive layer, a printed layer and a release layer. The second label may also include a substantially opaque layer to conceal the first label. The opaque layer may comprise an ink layer and may be substantially the same colour as the substrate. Alternatively, in certain circumstances, the opaque layer may be a different colour to the substrate.

The carrier may comprise a film on which the second label is mounted preferably at the release layer. The film may be a film of a plastics material.

In one embodiment, the carrier assembly comprises a plurality of the second labels mounted in succession on the carrier, and the carrier assembly being wound upon a reel. In this embodiment, the carrier further includes a second release layer mounted on the obverse side of the film whereby to prevent labels adjacent the film becoming attached thereto when the assembly is mounted on the reel.

According to another aspect of the invention there is provided a substrate having a first label substantially permanently attached thereto and a second label substantially concealing the first label, and the second label being removably attached to the substrate.

The second label is conveniently in the form of a transfer.

Preferably, the first label is applied to the substrate by a permanent printing process, for example screen printing.

The substrate may be a container, such as a crate for holding vessels of a drink, for example bottles or cans of an alcoholic or soft drink, such as beer, lager, cider, wine mineral water, fruit juice, lemonade, or the like.

Preferably, the second label comprises an adhesive layer to enable the second label to be attached to the substrate.

The adhesive layer may comprise a pressure sensitive adhesive whereby when the carrier assembly is applied to the substrate, the application of pressure to the carrier assembly attaches the second label to the substrate. The carrier assembly may or may not be heated prior to its attachment to the substrate.

The second label may comprise a plurality of layers including the adhesive layer, a printed layer and a release layer, and the printed layer being arranged conveniently between the adhesive and release layers. The second label may also include a substantially opaque layer to conceal the first label. The opaque layer may comprise an ink layer and may be substantially the same colour as the substrate. Alternatively, in certain circumstances, the opaque layer may be a different colour to the substrate.

Before being applied to the substrate, the second label may constitute part of a carrier assembly, the carrier assembly comprising a carrier, the second label be-

ing carried on the carrier.

The carrier may comprise a film on which the second label is mounted preferably at the release layer. The film may be a film of a plastics material.

In one embodiment, the carrier assembly comprises a plurality of the second labels mounted in succession on the carrier, and the carrier assembly being wound upon a reel. In this embodiment, the carrier further includes a second release layer mounted on the obverse side of the film whereby to prevent labels adjacent the film becoming attached thereto when the assembly is mounted on the reel.

According to another aspect of this invention there is provided a label carrier assembly comprising a carrier, a label carried on the carrier, the label comprising a plurality of layers comprising an adhesive layer to enable the label to be attached to a substrate, a release layer to enable the label to be attached to the carrier and a printed layer between the adhesive and the release layers.

The label may also include a substantially opaque layer. The opaque layer may comprise an ink layer and may be substantially the same colour as the substrate. Alternatively, in certain circumstances, the opaque layer may be a different colour to the substrate.

The carrier may comprise a film which may be a film of a plastics material.

The adhesive layer may comprise a pressure sensitive adhesive whereby when the carrier assembly is applied to the substrate, the application of pressure to the carrier assembly attaches the label to the substrate.

In one embodiment, the carrier assembly comprises a plurality of the second labels mounted in succession on the carrier, and the carrier assembly being wound upon a reel. In this embodiment, the carrier further includes a second release layer mounted on the obverse side of the film whereby to prevent labels adjacent the film becoming attached thereto when the assembly is mounted on the reel.

An embodiment of the invention will now be described by way of example only with reference to the accompanying drawing which shows schematically a labelling process.

The process shown in the drawing comprises a process of applying a removable label to a substrate over a permanently affixed label on the substrate, thereby to conceal the permanent label to enable the substrate to be used for purposes other than those for which it was originally intended. For example, in the beer industry, it is a considerable cost saving to be able to reuse crates for products other than the original product. It would be particularly advantageous to be able to use crates which have already been labelled. It would also be advantageous for the crate, after use, to revert to its usual identity.

The process comprises applying to a substrate, in the form of a crate 10 for beer bottles, a label 12 such that the label 12 is permanently affixed to the crate 10.

This can be carried out by any suitable printing process, for example a screen printing process. A crate carrying the label 12 is obviously then suitable for use with the products designated by the label 12 applied to the crate.

If, however, it is desired to use the crate for other products, this can be done by applying to the crate a second label 14.

The second label 14 is a multi-layer label comprising an adhesive layer 16, an opaque layer 18, a printed layer 20 and a release layer 22. The printed layer 20 may comprise a plurality of print layers. The label 14 is carried on a carrier 24 which comprises a film of a plastics material 26 and a second release layer 28. The label 14 is mounted on the carrier 24 to form a carrier assembly 30.

The layer 18 is an opaque layer formed by a suitable ink to conceal the label 12 beneath the label 14. The colour of the ink can be the same colour as that of the crate. The printed layer 20 provided the information which it is desired for the second label 14 to impart. The release layer 22 enables the carrier 24 to be removed from the label 14 without causing damage to the second label 14.

The carrier assembly 30 is wound upon a reel 32. It will be appreciated that, by being wound on the reel 32, each successive layer of the carrier assembly 30 will be arranged such that the adhesive layer 16 of one second label 14 is in contact with the second release layer 28 of the adjacent carrier 24. The provision of the second release layer 28, therefore, prevents the adhesive layer 16 adhering to the carrier 24.

The first step in the process involves applying to the crate 10 the first label 12 by an appropriate screen printing process. Immediately afterwards, or some time thereafter, the second label 14 is applied to the crate 10 to cover and conceal the first label 12. The crate 10 is arranged in an appropriate position, and the carrier assembly 30 is unwound from the reel 32. When the second label 14 is arranged in the appropriate position, pressure is applied as represented by the arrows designated P to press the carrier assembly 30 against the crate 10 covering the first label 12. The application of pressure to the carrier 30 causes the adhesive layer 16 to adhere to the crate 10, and when the pressure P is released, the carrier 24 can be removed from the label 14 leaving the label 14 attached to the crate 10. The carrier 24 can then be wound onto a storage reel 34 and can, if desired be reused at some subsequent time. A further crate 10 is then arranged in position, or the same crate 10 is arranged with a different side, facing the carrier assembly 30 and the further of the carrier assembly 30 is unwound from the reel 32 to enable a further second label 14 to be applied to the further crate 10, or to the same crate.

The film 26 is a suitable plastics film, for example polypropylene or polyethylene.

After the crate 10 has been used, with the label 14 applied thereto as aforesaid, and is no longer required

for the products designated by the label 14, the label 14 can be removed by a suitable washing process, for example by directing at the label 14 in the crate 10 a jet of water from an appropriate hosepipe. When the label 14 has been removed, or all labels 14 have been removed, from the crate 10, the label(s) 12 will be visible. The crate 10 can then be used for products designated by the label 12.

Various modifications can be made without departing from the scope of the invention.

Whilst endeavouring in the foregoing specification to draw attention to those features of the invention believed to be of particular importance it should be understood that the Applicant claims protection in respect of any patentable feature or combination of features hereinbefore referred to and/or shown in the drawings whether or not particular emphasis has been placed thereon.

### Claims

1. A labelling process comprising a first step of applying a first label relatively permanently to a substrate and thereafter a second step of applying a second label to the substrate such that the second label can be removed from the substrate, wherein, when the second label is so applied, the second label substantially conceals the first label.
2. A process according to claim 1, wherein the first label is applied to the substrate by a permanent printing process, for example screen printing.
3. A process according to claim 1 or 2 wherein the step of applying the second label to the substrate is such that it can be removed from the substrate after application thereto substantially without removing the first label.
4. A process according to any preceding claim, wherein the removal of the second label is effected by an appropriate washing process.
5. A process according to claim 4, wherein the washing process involves directing at the second label, for example by hosing or spraying, appropriate fluid, such as water.
6. A process according to any preceding claims, wherein the second step comprises attaching the second label to the substrate by a transfer printing process, in order to temporarily obscure the first label.
7. A process according to any preceding claim, wherein the second label comprises an adhesive layer to enable the second label to be attached to the substrate.
8. A process according to any preceding claim, wherein the second step includes the further steps of providing a label carrier assembly comprising the second label and a carrier carrying the second label, applying the assembly to the substrate to attach the second label to the substrate, and thereafter removing the carrier from the second label to leave the second label attached to the substrate.
9. A process according to claim 8, wherein the adhesive layer comprises a pressure sensitive adhesive whereby when the carrier assembly is applied to the substrate, the application of pressure to the carrier assembly attaches the second label to the substrate.
10. A process according to claim 9, wherein the carrier assembly may or may not be heated prior to its attachment to the substrate.
11. A process according to claim 7 or any of claims 8 to 10 when dependent on claim 7 wherein the second label comprises a plurality of layers including the adhesive layer, a printed layer and a release layer.
12. A process according to claim 11, wherein the second label also includes a substantially opaque layer to conceal the first label.
13. A process according to claim 12, wherein the opaque layer comprises an ink layer and is substantially the same colour as the substrate.
14. A process according to claim 7, wherein the carrier comprises a film on which the second label is mounted at the release layer.
15. A process according to claim 8, wherein the carrier assembly comprises a plurality of the second labels mounted in succession on the carrier, the carrier assembly being wound upon a reel, the carrier further including a second release layer mounted on the obverse side of the film whereby to prevent labels adjacent the film becoming attached thereto when the assembly is mounted on the reel.
16. An arrangement comprising a substrate, a first label applied relatively permanently to the substrate and a second label applied to the substrate, wherein the second label substantially conceals the first label, and the second label is removably attached to the substrate.
17. An arrangement according to claim 16, wherein the first label is applied to the substrate by a permanent

printing process, for example screen printing.

18. An arrangement according to claim 16 or 17 wherein the second label is in the form of a transfer. 5
19. An arrangement according to any claim 16, 17 or 18 wherein the second label comprises an adhesive layer to enable the second label to be attached to the substrate. 10
20. An arrangement according to claim 19 wherein the adhesive layer comprises a pressure sensitive adhesive. 15
21. An arrangement according to claim 19 or 20 wherein the second label comprises a plurality of layers including the adhesive layer, a printed layer and a release layer. 20
22. An arrangement according to claim 21, wherein the second label also includes a substantially opaque layer to conceal the first label. 25
23. An arrangement according to claim 22, wherein the opaque layer comprises an ink layer and is substantially the same colour as the substrate. 30
24. A label carrier assembly comprising a carrier, a label carried on the carrier, the label comprising a plurality of layers comprising an adhesive layer to enable the label to be attached to a substrate, a release layer to enable the label to be attached to the carrier and a printed layer between the adhesive and the release layers. 35
25. A label carrier assembly according to claim 25 wherein the adhesive layer comprises a pressure sensitive adhesive whereby when the carrier assembly is applied to the substrate, the application of pressure to the carrier assembly attaches the second label to the substrate. 40
26. A label carrier assembly according to claim 24 or 25 wherein the label also includes a substantially opaque layer. 45
27. A label carrier assembly according to claim 26 wherein the opaque layer comprises an ink layer and is substantially the same colour as the substrate. 50
28. A label carrier assembly according to any of claims 24 to 27 wherein the carrier comprises a film on which the label is mounted at the release layer. 55
29. A label carrier assembly according to any of claims 24 to 28 wherein the carrier assembly comprises a plurality of the second labels mounted in succes-

sion on the carrier, the carrier assembly being wound upon a reel, the carrier further including a second release layer mounted on the obverse side of the film whereby to prevent labels adjacent the film becoming attached thereto when the assembly is mounted on the reel.

30. Any novel subject matter or combination including novel subject matter disclosed, whether or not within the scope of or relating to the same invention as any of the preceding claims.

