Digitally Printed Variable Data Interactive Rotating Label and Construction Of Same

Field of the invention

This invention generally realtes to a digitally printed variable data interactive rotating label and construction of same

Problem - Background of the invention

With the advent of digital printing it is more common for manufacturers to use variable data on packaging, literature, and other products. Variable data allows the manufacturer to customize the package, literature, or other product with unique data, names, pictures, illustrations, or other information specific to the recipient or consumer. For example you may receive a piece of mail with your specific name printed on the literature. Another example would be a packaged good that you order is delivered with your name or photo printed on the packaging. Due to the nature of how digital printing works it allows manufacturers to customize each individual product, printed piece, or other product to each of the intended recipients.

There is a need in the industry for a digitally printed variable data interactive package.

Solution - Description of the invention

My solution (invention) is an interactive rotating label that provides a digitally printed variable data base label that can be customized for each intended recipient.

This interactive rotating label consists of a base label that is applied to a bottle, container, drinking vessel such as a cup, or other packaged good. This base label can be any label format such as, but not limited to a pressure sensitive roll fed, cut & stack, shrink or stretch sleeve label construction. For this application the preferred labeling method is Roll Fed. The base label artwork is digitally printed onto the substrate or directly onto the container itself, thus allowing the digital printer/press to use variable data that is preprogramed and printed on the label. The base label is imprinted with photographs, indicia, graphics, photographs, 2D bar codes, QR codes, or other information that is desired on the label. The number of panels of information printed on the base label is determined by the size of the window in the top label and by the number desired by the manufacturer.

Next the construction consists of a top label that is applied to the container over the base label. The top label is temporarily coupled to the base label or container by the use of adhesive, pressure, or other means. This top label has one or more clear windows (clear, non-printed areas) through which the information printed on the base label can be seen as

it rotates about the container. This top label can be any label format, from pressure sensitive, roll fed, cut & stack, shrink, or stretch sleeve. The preferred method as illustrated in this application is Roll Fed. After the top label is applied to the container it uncouples from the base label or container and rotates about the container.

After the top and base labels are applied to the container a consumer can rotate the top label about the container to reveal the variable data printed on the base label through the top labels window(s).

The method of collection for the variable data can vary. Most commonly the consumer would upload photos, graphics, or other data as well as typing or entering additional data into a website, mobile device application, or other electronic means to construct the variable data that would be printed on the base label. The manufacturer would then take that data and digitally print the data onto the base label. Due to the nature of digital printing the consumer or the manufacturer could specify anywhere from one to an unlimited number of base labels as required. The digital printing of the base labels allows for small quantities to be printed, such as a single label, which allows the manufacturing cost of the label to be very low. Digitally printed variable data allows for each individual label on the roll to be different. It does not matter if 1, 100, 10,000 or 1 million labels are being printed, each on the roll could contain different information.

Summary

Current package labeling can only provide one facing for digitally printed variable data. My invention would create an interactive rotatable label, which has a digitally printed base label allowing said base label to have variable data. As the consumer rotates the outer label they would see the variable data printed on the base label through a window or any number of windows in the top label.

Drawings

Drawing 1: Shows the consumer or end user uploading photographs, graphics, or entering other data for the base label.

Drawing 2: Shows two base labels printed with variable data.

Drawing 3: Shows one base label applied to a container.

Drawing 4: Shows the base artwork printed directly on the container.

Drawing 5: Shows a top roll fed label.

Drawing 6: Shows the top roll fed label being applied to the container over the base label.

Drawing 7: Shows the top label rotating about the container revealing the variable data as printed on the base label through the clear window.