Description

CAN DECORATOR APPARATUS~~CONTAINER~~

Technical Field

[0001] The present invention relates to a can decorator apparatus and method.

Background Art

[0002] Metal cans such as steel and aluminium beverage cans are commonly manufactured in two pieces. A first part comprises a generally cylindrical container body with integral base, formed from a circular metal disk using a drawing and ironing process. A second part comprises an end having a tab or ring-pull formed therein. The can is filled, e.g. with beverage, and the end subsequently fixed to the body using a seaming process.

[0003] Can decorators are known in the art for applying decoration to the external surface of a can body. A typical decorator is used to apply decoration to the can body prior to filling of the can body and prior to seaming of the end. The prior art can decorator is a relatively complex apparatus, but is illustrated schematically in Figure 1. On the left hand side of the illustration there is shown a can body conveying mechanism comprising a set of mandrels rotating about a common axis. Unprinted or "blank" can bodies are loaded onto the mandrels. These are then rotated into a printing zone where the can bodies are brought into contact, i.e. rolled across, pre-inked blankets mounted on a blanket wheel via respecting blanket segments. Figure 1 illustrates a blanket wheel comprising eight blankets.

[0004] Figure 1 also illustrates six ink stations, each comprising an ink reservoir, a printing plate (typically having an image embossed thereon), and a delivery mechanism for ensuring even application of ink from the reservoir to the printing plate. Each blanket passes through the ink stations in sequence such that a blanket leaving the final ink station has a composite (in this case, six colour) ink image formed on a printing surface thereof. This composite image is transferred to a can body in the printing zone. Figure 2 further illustrates a 6 colour printing process, where the first five ink stations apply letters of the word "PRINT" in sequence in different colours. The final ink station (applying red ink) applies a background colour to the blanket. It will be appreciated that the word is formed in