(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 261 401**
B1

(12) EUROPEAN PATENT SPECIFICATION

(45) Date of publication of the patent specification: **13.06.90**

(51) Int. Cl.⁵: **B44C 1/16**, B44C 1/10, B44C 1/175, B44F 1/06

(21) Application number: **87112100.0**

(22) Date of filing: **20.08.87**

(54) A new art of applying a design to the inside wall of a transparent container where it cannot be directly reached by the hand.

(30) Priority: **24.09.86 CN 86106465**

(43) Date of publication of application: **30.03.88 Bulletin 88/13**

(45) Publication of the grant of the patent: **13.06.90 Bulletin 90/24**

(84) Designated Contracting States: **DE FR GB**

(56) References cited: **US-A- 2 546 360**

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escription

The present invention relates to a new art of applying a design to the inside wall of a transparent container where it cannot be directly reached by the hand.

The art of applying design to a surface of a container has a long history but, in general, in the above process, the hand can directly reach the surface of the container where the process of applying a design thereto is being carried out. For example, the Japanese Letters of Patents No. Sho 54-89812 and No. Sho 54-6612, which have been found after a search relate to applying designs to trays or to the outside surfaces of containers. However, should there be need for applying a design to the inside wall of a container with a small mouth (that is, when the hand cannot reach directly into the inside of the container), then this work cannot be done by existing techniques. The decoration can only be made by inner painting, such as the inner painted snuff bottles, which is a labour-intensive and time-consuming job. The costs are quite high and mass production is not possible.

The purpose of the present invention is to provide a new art of applying a design to the inside surface of a transparent container, such as a glass container, where the hand cannot reach directly, and to provide a method suitable for industrial production.

This process of the art is carried out by filling the transparent container to be decorated with water and inserting a roll of decal cellophane which is lined with a backing paper, into the container. In the water, the decal cellophane comes off from the backing paper automatically. Then, remove the backing paper out of the container, locate the decal cellophane to its correct position on the inside wall of the container, and drain off the liquid. Then, with the help of a small bamboo stick or the like, place the decal cellophane onto its exactly right position while smoothing out the air bubbles between the decal cellophane and the inside wall of the container. Put the container upside down to let the water drain away thoroughly. Then, dry it. When the water is completely evaporated, bake the container according to the temperature and time as specified on the decal paper. Or, put the decal paper in another container filled with a liquid and wait until the decal cellophane comes off from the backing paper automatically, roll the decal cellophane onto a small bamboo stick or the like and insert it into the transparent container to be decorated, which is filled with a liquid such as water. Locate the decal cellophane to its correct position on the inside wall of the transparent container and drain the liquid away from the transparent container. Then, with the help of a small bamboo stick or the like, place the decal cellophane onto its exactly right position while smoothing out the air bubbles between the decal cellophane and the inside wall of the container. Put the container upside down to let the liquid drain away thoroughly. Then dry it. When the water is completely evaporated, bake the container according to the temperature and time as specified on the decal paper.

The above method of applying a design to the inside wall of a transparent container is lower in cost, easier to process and more suitable for mass production as compared with the art of inner painting. Moreover, this kind of decal inner-decorated transparent container is distinguished for brightly coloured appearance, elaborate workmanship. The decal decoration is long lasting and resistant to water, alcohol and high temperture. The method can be used in the decoration of perfume bottles, lamps, vases, ornaments, and tinkle bells etc. To replace the magic art of inner painting with inside decal printing will facilitate the popularization an industrialized production.

A practical example of the process of applying a design to the inside wall of a snuff bottle is as follows.

To fill the snuff bottle with water. Roll up the decal cellophane which is lined with a backing paper, and insert it into the snuff bottle. Soaked in water, the decal cellophane will automatically come off from the backing paper. Remove the backing paper with a pair of tweezers and put the decal cellophane onto its correct position. Suck the water out of the bottle, and at the same time, locate the decal cellophane into its exactly right position with a small bamboo stick or the like and smooth out the air bubbles between the decal cellophane and the inside wall of the snuff bottle. Then bake the snuff bottle at a low temperature until it become thoroughly dry. Bake again according to the required temperature and time as specified on the decal paper. Then the cellophane lining on the decal will volatilize automatically and the design remains on the inside wall of the snuff bottle. When it cools down to normal termperature, the process of applying a design to the inside wall of the snuff bottle is completed.

Claims

1. A method for applying a design to an inside wall of a transparent container comprising the steps of:
filling said transparent container to be decorated with liquid;
inserting a decal cellophane into said transparent container;
locating said decal cellophane on said inside wall of said transparent container;
draining of said liquid;
smoothing out bubbles between said decal cellophane and said inside wall of said transparent container by smoothing means;
removing remaining liquid out of said transparent container;
drying said transparent container;
baking said transparent container.

2. A method for applying a design to an inside wall of a transparent container as claimed in claim 1 characterized in that said decal cellophane is lined with a backing paper which detaches itself from said decal cellophane in said liquid and is removed out of said container.

3. A method for applying a design to an inside wall of a transparent container as claimed in claim 1 characterized in that said decal cellophane is obtained

by inserting said decal cellophane lined with a backing paper into any container filled with liquid whereby said backing paper detaches itself from said decal cellophane.

4. A method for applying a design to an inside wall of a transparent container as claimed in any one of the preceding claims characterized in that said container is of glass.

5. A method for applying a design to an inside wall of a transparent container as claimed in claim 1, wherein said smoothing means is a small bamboo stick.

Patentansprüche

1. Verfahren zur Aufbringung eines Musters an einer Innenwand eines durchsichtigen Behälters mit den Schritten:

Füllen des zu verzierenden durchsichtigen Behälters mit einer Flüssigkeit;

Einführen eines Cellophan-Abziehbildes in den durchsichtigen Behälter,

Anordnen des Cellophan-Abziehbildes auf der Innenwand des durchsichtigen Behälters;

Ausleeren der Flüssigkeit;

Glätten von Luftblasen zwischen dem Cellophan-Abziehbild und der Innenwand des durchsichtigen Behälters mit Hilfe eines Glättungsmittels;

Entfernen der verbleibenden Flüssigkeit aus dem durchsichtigen Behälter;

Trocknen des durchsichtigen Behälters;

Erhitzen des durchsichtigen Behälters.

2. Verfahren zur Anbringung eines Musters an einer Innenwand eines durchsichtigen Behälters nach Anspruch 1, dadurch gekennzeichnet, daß das Cellophan-Abziehbild mit einem Trägerpapier unterlegt ist, das sich selbst von dem Cellophan-Abziehbild in der Flüssigkeit löst und aus dem Behälter entfernt wird.

3. Verfahren zur Anbringung eines Musters an einer Innenwand eines durchsichtigen Behälters nach Anspruch 1, dadurch gekennzeichnet, daß das Cellophan-Abziehbild durch Einsetzen des Cellophan-Abziehbildes, das mit dem Trägerpapier unterlegt ist, in einen Behälter, der mit Flüssigkeit gefüllt ist, erhalten wird, wobei das Trägerpapier sich selbst von dem Cellophan-Abziehbild löst.

4. Verfahren zur Anbringung eines Musters an einer Innenwand eines durchsichtigen Behälters nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß der Behälter aus Glas besteht.

5. Verfahren zur Anbringung eines Musters an einer Innenwand eines durchsichtigen Behälters nach Anspruch 1, dadurch gekennzeichnet, daß das Glättungsmittel ein kleiner Bambusstab ist.

Revendications

1. Procédé pour appliquer un motif à la paroi intérieure d'un récipient transparent comprenant les étapes consistant:

à remplir avec un liquide ledit récipient transparent à décorer,

à insérer une cellophane à décalcomanie dans ledit récipient transparents,

à mettre en place ladite cellophane à décalcomanie sur ladite paroi intérieure dudit récipient transparent,

à évacuer le liquide;

à chasser les bulles entre ladite cellophane à décalcomanie et ladite paroi intérieure dudit récipient transparent à l'aide d'un moyen d'aplanissement;

à retirer dudit récipient transparent le liquide restant;

à faire sécher ledit récipient transparent;

à soumettre à une cuisson ledit récipient transparent.

2. Procédé pour appliquer un motif à la paroi intérieure d'un récipient transparent selon la revendication 1, caractérisé en ce que ladite cellophane à décalcomanie est doublée avec un papier de renforcement qui se détache de lui-même de ladite cellophane à décalcomanie dans ledit liquide et qui est retiré récipient.

3. Procédé pour appliquer un motif à la paroi intérieure d'un récipient transparent selon la revendication 1, caractérisé en ce que ladite cellophane à décalcamonie est obtenue en insérant ladite cellophane à décalcomanie doublée avec un papier de renforcement dans n'importe quel récipient rempli de liquide grâce à quoi ledit papier de renforcement se détache de ladite cellophane de décalcomanie.

4. Procédé pour appliquer un motif à la paroi intérieure d'un récipient transparent selon l'une quelconque des revendications précédentes, caractérisé en ce que ledit récipient est en verre.

5. Procédé pour appliquer un motif à la paroi intérieure d'un récipient transparent selon la revendication 1, dans lequel ledit moyen d'aplanissement est un petit bâton en bambou.

REGISTER ENTRY FOR EP0261401

European Application No EP87112100.0 filing date 20.08.1987

Priority claimed:
24.09.1986 in China - doc: 86106465

Designated States DE FR GB

Title A NEW ART OF APPLYING A DESIGN TO THE INSIDE WALL OF A TRANSPARENT CONTAINER WHERE IT CANNOT BE DIRECTLY REACHED BY THE HAND

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Classified to
B6G U1S
B44C B44F

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Publication No EP0261401 dated 30.03.1988
Publication in English

Examination requested 20.08.1987

Patent Granted with effect from 13.06.1990 (Section 25(1)) with title A NEW ART OF APPLYING A DESIGN TO THE INSIDE WALL OF A TRANSPARENT CONTAINER WHERE IT CANNOT BE DIRECTLY REACHED BY THE HAND.

14.05.1990 Notification from EPO of change of Applicant/Proprietor details
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Entry Type 8.11 Staff ID. SLP1 Auth ID. F51

**** END OF REGISTER ENTRY ****

RENEWAL DETAILS

PUBLICATION NUMBER	EP0261401

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DATE FILED	20.08.1987
DATE GRANTED	13.06.1990
DATE NEXT RENEWAL DUE	20.08.1993
DATE NOT IN FORCE	
DATE OF LAST RENEWAL	23.07.1992
YEAR OF LAST RENEWAL	06
STATUS	PATENT IN FORCE