(12) UK Patent (19) GB (11) 2 235 378 (13) B

(54) Title of Invention

Artifical flowers

(51) INT CL[5]; A41G 1/00

(21) Application No
9011058.6

(22) Date of filing
17.05.1990

(43) Application published
06.03.1991

(45) Patent published
31.07.1991

(72) Inventor(s)
George Yue Sin Koo

(73) Proprietor(s)
United Chinese Plastics
Products Company Limited

(Incorporated in Hong Kong)

Block C&D
6th Floor,
Eldex Industrial Building
21 Mau Tau Wei Road
Hunghom
Kowloon
Hong Kong

(74) Agent and/or
Address for Service
Lloyd Wise Tregear & Co
Norman House
105-109 Strand
London
WC2R OAE
United Kingdom

(52) Domestic classification
(Edition K)
A4X X15
U1S S2299

(56) Documents cited
None

(58) Field of search

As for published application
2235378 A *viz:*
UK CL(Edition K) A4X
INT CL[5] A41G
Online Databases:WPI
updated as appropriate

2235378

FIG.1

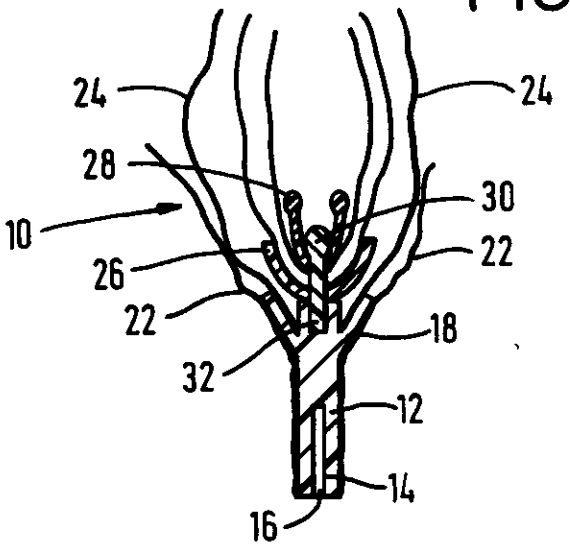
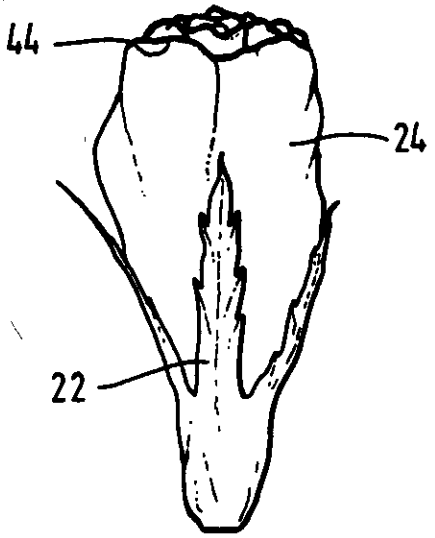


FIG. 2



2235378

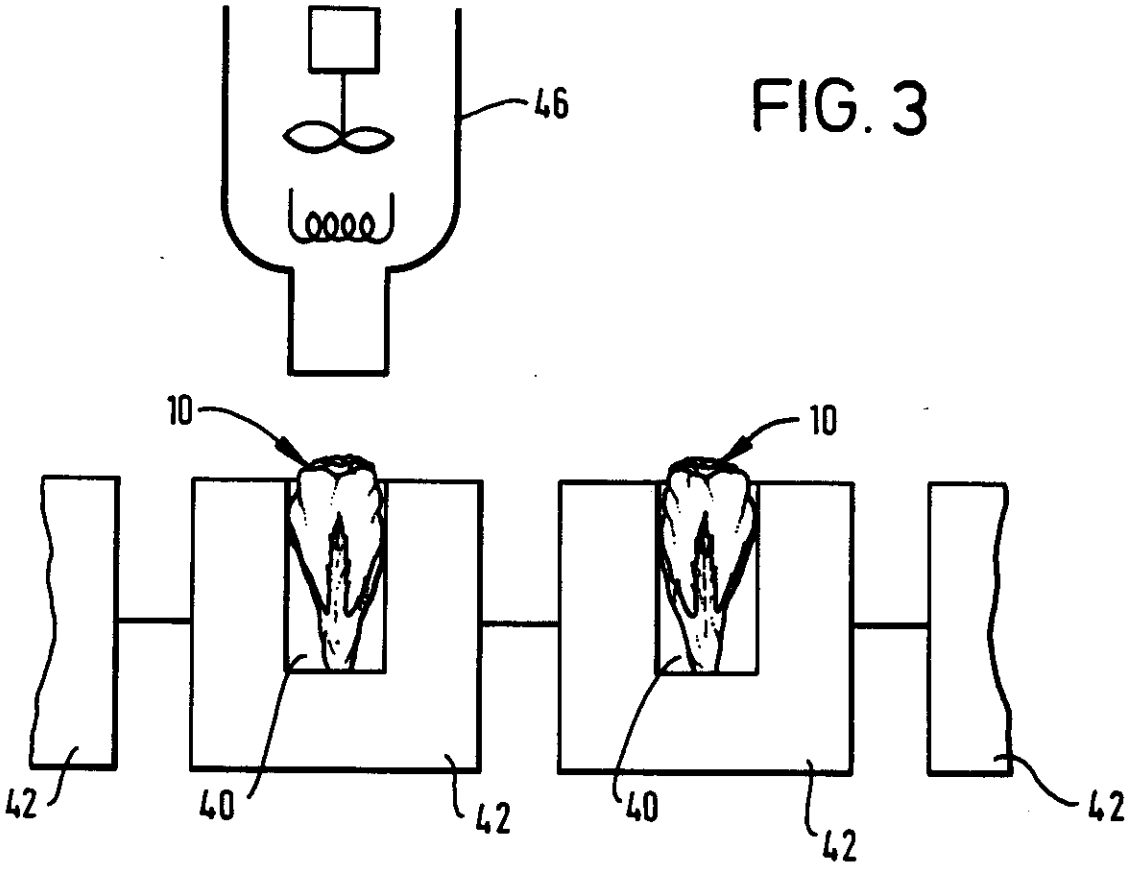
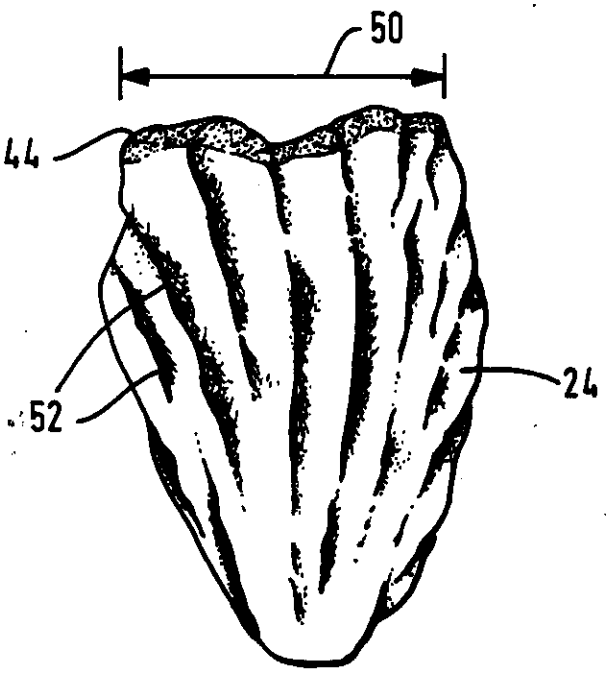


FIG. 3

FIG. 4



ARTIFICIAL FLOWERS

This invention relates to artificial flowers and in particular an artificial flower which simulates a dried flower.

The accuracy of simulation of a real flower by an artificial flower has improved to such an extent that the latest artificial flowers can be difficult to distinguish from a real flower unless one examines the flower closely. Such artificial flowers are in general made with fabric petals, the pieces of fabric to simulate the petals being moulded to a realistic shape and coloured and/or printed to provide an accurate visual appearance.

Generally the fabric used is a woven polyester fabric but other material or synthetic yarns can be used to make the fabric. Also the fabric may have been sized with a stiffening agent to help the fabric retain its moulded shape.

It is an object of the invention to provide an artificial flower which simulates a dried flower.

According to the invention an artificial bloom having petals made of a synthetic fabric is subjected to heating directed at the tips of the petals whilst the main body of the bloom is protected from the heat so as to melt or fuse the material of the fabric in the region of the tips, thereby giving the artificial bloom a shrivelled, dried-up appearance.

Such a procedure is very simple yet a very realistic result is achieved.

Also, according to the invention there is provided an artificial bloom resembling a dried flower having a number of petals made from synthetic fabric in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower.

According to one embodiment of the invention the heating of the petal tips is achieved by directing a stream of hot air at the bloom whilst at the same time covering and shielding all but the tips of the bloom from the direct heat. Preferably the body of the bloom is shielded from the heat by being received in a recess in a mass of material which will act as a heat sink, eg a metal which has good heat conductivity, so that any heat from the hot air which reaches the main body of the bloom transfers to the heat sink and does not melt the material of the petals except at their tips which are left fully exposed to the hot air.

Inevitably, however, the main body of the bloom will be heated to some degree and this may lead to a fading of the colours to which the fabric material is dyed and perhaps some shrinking of the material of the petals so adding further to the realism of the simulation.

By the term "bloom" we mean a flower head or bud of some sort. The making of such flower heads is conventional and well known and frequently involves using a

pre-moulded pedicel or stem part over which a number of printed textile material petals and the like are positioned together with members to help shape the blooms and a central pre-moulded stamen portion, and finally everything is held in place by a plug member which is frictionally engaged with the moulded stem part to lock all the parts together.

An example of the manufacture of an artificial dried flower according to the invention will now be described with reference to the accompanying drawings, in which:

Figure 1 is a cross sectional diagram of a flower head;

Figure 2 is a view of the artificial flower before the step of heating;

Figure 3 is a cross sectional diagram showing the heating step; and

Figure 4 is a detail view of one petal in the finished artificial dried flower.

As a first step the flower head 10 is pre-formed. This comprises a base 12 in the form of a synthetic plastics moulding including a short length of stem 14 in the form of the pedicel of the flower and having a hollow central core 16. Also integrally formed with the pedicel are sepals 18 which are formed by moulding portions of the base with small fabric portions 22 or by sticking the fabric portions 22 to the base 12.

In addition petals 24 are formed from fabric material such as a woven polyester fabric and are printed and shaped in a known manner. A number of these are joined and are positioned over the base 12. Shaping elements 26 in the form of stiff plastic fingers positioned around a central core are provided intermediate some or all of the petals to give the required shape. Again this is conventional. Further the pistils 28 of the flower are also pre-shaped and positioned over the petals in the centre. Everything is held in place by a central plug 30 which includes an integral downwardly extending stem 32 which is wedged or glued into the open top of the base 12.

Flower heads formed in this way are entirely conventional and well known and are not believed to require any further explanation.

The thus assembled flower head 10 is next placed in a recess 40 in a metal body 42. The size of the recess 40 is such that the tips 44 of the petals are exposed whilst the main body of the flower head is housed within the recess and so not exposed. The tips of the flower head are then subjected to a blast of hot air from a blower 46. Conveniently the body 42 can form part of a conveying system made up of a multitude of such bodies so that flower heads can be progressively advanced and subjected to the heating step.

The blower is conveniently a commercial hot air blower with the air at a temperature of around 180 to

220°C. It is, therefore, hot enough to heat the tips 44 above a temperature at which the polyester material of the petals softens and melts. The length of time during which the petal tips are exposed to the hot air blast is chosen so that the tips 44 do melt and contract. However, the enclosing of the rest of the body of the flower head in the recess 40 ensures that it is only the tips of the petals which melt. The metal body 42 ensures that the heat of any air which may enter the body of the flower is conducted away and that the body does not reach the softening or melting temperature of the polyester material. The body does, however, get hot and so some shrinkage of the polyester material of the main body of the petals may occur so giving the body a shrivelled, "dried out" appearance. As seen in Figure 4 the tips 44 have melted and in so doing the tips contract width-wise in the direction of the arrow 50 so causing the petal to wrinkle and fold, eg along the lines 52. Also some fading of the dyes used to colour the petals may occur so adding to the realism of the simulation of a dried flower.

After being removed from the air blast the flower head is allowed to cool within the recess whilst the body 40 is cooled and thereafter the finished dried flower is removed.

Either before or after being subjected to the hot air, the flower can be joined to a stem and artificial

leaves in an entirely conventional manner which is not felt to require further explanation.

CLAIMS :

1. A method of making an artificial bloom resembling a dried flower in which an artificial bloom having petals made of a synthetic fabric is subjected to heating directed at the tips of the petals whilst the main body of the bloom is protected from the heat so as to melt or fuse the material of the fabric in the region of the tips, thereby giving the artificial bloom a shrivelled, dried-up appearance.

2. A method as claimed in Claim 1 in which the heating is achieved by directing a stream of hot air at the bloom whilst at the same time covering and shielding all but the tips of the bloom from the direct heat.

3. A method as claimed in Claim 2 in which the body of the bloom is shielded from the heat by being received in a recess in a mass of material which will act as a heat sink.

4. A method as claimed in any preceding claim in which the synthetic fabric of the petals is a woven polyester fabric.

5. A method of making an artificial bloom resembling a dried flower substantially as herein described with reference to the accompanying drawings.

6. An artificial bloom resembling a dried flower when made by a method as claimed in any preceding claim.

7. An artificial bloom resembling a dried flower having a number of petals made from synthetic fabric in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower.

8. An artificial bloom substantially as herein described with reference to Figure 4 of the accompanying drawings.

REGISTER ENTRY FOR GB2235378

Form 1 Application No GB9011058.6 filing date 17.05.1990

Title ARTIFICAL FLOWERS

Applicant/Proprietor
UNITED CHINESE PLASTICS PRODUCTS COMPANY LIMITED, Incorporated in Hong Kong, Block C&D, 6th Floor,, Eldex Industrial Building, 21 Mau Tau Wei Road, Hunghom,, Kowloon, Hong Kong [ADP No. 007968130021

Inventor
GEORGE YUE SIN KOO, Blk C & D, 6th Floor, Eldex Industrial Building, 21 Ma Tau Road, Hunghom, Kowloon, Hong Kong [ADP No. 057539000011

Classified to
A4X U1S
A41G

Address for Service
LLOYD WISE TREGEAR & CO, Norman House, 105-109 Strand, London, WC2R 0AE, United Kingdom [ADP No. 000001170011

Publication No GB2235378 dated 06.03.1991

Examination requested 13.11.1990

Patent Granted with effect from 31.07.1991 (Section 25(1)) with title
ARTIFICAL FLOWERS

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