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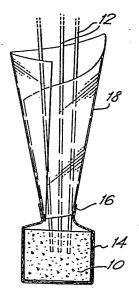
Applicant: WALPOLE FRUIT PACKERS LIMITED
Broadend Road Walsoken
Wisbech Cambridgeshire(GB)

(72) Inventor: Wilkes-Chase, Kenneth "Beit-Shalom" Sandringham Avenue Wisbech Cambridgeshire(GB)

(74) Representative: Thomson, Roger Bruce et al,
POLLAK MERCER & TENCH High Holborn House 52-54
High Holborn
London WC1V 6RY(GB)

(54) Flower packs and methods of packaging flowers.

(5) A flower pack comprises a water-retaining medium (10) into which the stems (12) are inserted, and a wrapping (14,18) which both encloses the water-retaining medium and also encircles and protects the greater part of the stems. The wrapping preferably comprises a first sheet-form piece (14) of soft, waterproof plastics material which defines a bag for the medium (10) and has a collar (16), and a second sheet-form piece (18) of relatively stiff, crisp plastics material. The two sheets (14,18) may be heat sealed at the collar (16).



#### FLOWER PACKS AND METHODS OF PACKAGING FLOWERS

### SPECIFICATION

This invention relates to the packaging of flowers, and is particularly concerned with improved methods of packaging cut flowers which are for display and sale.

The conventional practice in the marketing of cut flowers for sale in shops, supermarkets, markets 10 and other retail outlets is just to wrap a number of flowers in a cone of paper or plastics material with the stems protruding from the lower end of the cone and simply to stand these wrapped flowers in a bucket of water. When a customer wishes to buy one of the 15 items, the wrapped flowers are simply removed from the bucket or other container, and may perhaps be overwrapped in an attempt to prevent excessive dripping of water from the stems. This conventional system has two main disadvantages. Firstly, the customer 20 has the problem of water dripping from the stems, and secondly, and more importantly, unless the flowers are immersed in water again very quickly their life will be considerably diminished and their freshness and general 25 appearance will be adversely affected.

Attempts have been made to overcome the first of these two problems by putting the wrapped flowers in a special water container which has resilient flaps through which the stems are pushed when inserting the flowers into the container and which serve to "wipe" water from the stems as the flowers are withdrawn from the container. However, the efficiency of these flaps is relatively low, and, in any case, this offers no solution to the problem of the flowers being out of water for perhaps a considerable length of time.

It is also known to mount flowers in a waterretaining porous block when designing floral arrangements, for example in a vase or bowl. Here however
the block is used primarily as a supporting medium and
one which enables the designer to set the flowers into
it in any desired position.

It is an object of the present invention to provide an improved method of packaging flowers, and an improved floral pack, whereby the aforesaid problems 20 are completely overcome and one has an attractive, easily manageable, and yet efficient means of retaining the flowers at their optimum condition for extended periods of time.

In accordance with the present invention this is
25 achieved by a method of packaging flowers which comprises mounting the flowers with their stems in a
water-retaining medium, and enclosing the waterretaining medium and at least a substantial length of
the flower stems in wrapping material which serves both
30 to encircle and protect the flowers and also to conserve
water in the water-retaining medium.

Also in accordance with the present invention there is provided a flower pack comprising a waterretaining medium into which the stems of flowers are arranged to be inserted, and wrapping means arranged

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both to encircle and protect at least a substantial length of the flower stems and also to enclose the water-retaining medium to conserve water therein.

By this means one achieves a complete unitary

5 flower pack where there is no danger of water dripping
from the pack and where the flower stems are maintained
in permanent contact with the water contained in the
water-retaining medium unit1 the purchaser actually
removes them from the pack. This solves both the

10 aforementioned problems associated with conventional
methods of packaging and selling flowers.

Preferably, the wrapping means comprises a first piece of sheet-form wrapping material defining a bag for said medium and having an upstanding collar, and a second piece of sheet-form wrapping material defining a frusto-conical enclosure for the stems and having its narrow end in overlapping relationship with the collar. The two pieces of wrapping material are preferably sealed one to the other in the region of the collar.

In a preferred embodiment of the invention, different wrapping materials are used for the encircling cone and for the enclosure of the water-retaining medium. Preferably, two different types of plastics sheet material are used, suitably overlapping to provide a composite enclosure.

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The water-retaining medium may consist of any suitable material, although it is preferred to use a material such as that sold under the trade mark "Oasis" which can be used in block form and which in addition to its moisture-retaining properties has a certain degree of strength and rigidity.

In order that the invention may be fully understood, reference is now made to the following detailed description of one embodiment of pack in accordance with the invention, and with reference to the accompanying drawing which is a schematic view of such a pack.

Referring to the drawing, this shows a block 10 of inert, porous, rigid, crushable, water - retaining material, for example such as that sold under the trade 5 mark "Oasis". This block 10 may be cylindrical, cuboidal, or of any other suitable shape. The stems 12 of a number of flowers are inserted into the waterretaining block 10, as indicated. The term "flowers" used herein is intended to include not only flowers 10 but also other plant material appropriate to be treated according to the invention. The block 10 is enclosed within a sheet 14 of waterproof plastics material which is preferably flexible and can readily adapt to the shape of the block 10. The sheet 14 is in the form of a bag or pouch which encloses the block and which includes an upwardly extending collar 16 around the stems 12. At least a substantial length of the flower stems is enclosed by a second sheet 18 of plastics material, wrapped to form a frusto-conical sleeve. The narrow end of the wrapping sleeve fits within the 20 upstanding collar 16 and the two sheets of plastics material are suitably connected at this region. example, the two sheets of plastics material can be firmly welded one to the other, e.g. by heat sealing, 25 to form a permanent seal between them. Alternatively, a retaining band or clip may be placed around the outside of the collar 16 to hold the two sheets securely together, although this can damage the stems unless care is taken.

30 Preferably, the wrapping sleeve 18 is made of a different material from that of the sheet 14 enclosing the block 10. The material used for the wrapping sleeve 18 is preferably a relatively stiff, crisp, glossy plastics material which is not susceptible to tearing, 35 creasing, etcetera in order to give an appearance of

quality to the pack. The plastics material used for
the lower sheet 14 on the other hand need not be of
such high quality and is preferably relatively soft and
flexible to conform to the shape of the block within it.

5 However, it is to be noted that the use of any
appropriate material is to be considered as falling
within the scope of the present invention, whether the
same or different materials are used for the upper and
lower sheets, and whether one uses plastics material or

10 other materials for this purpose. It is also to be
considered as falling within the scope of the invention
to use just a single one-piece wrapping sheet instead of
two separate sheets.

It is also within the scope of the present 15 invention to use a non-rigid water-retaining medium into which the flower stems dip. For example, one could simply use a ball of wet moss or the like, the enclosing sheet of wrapping material conserving the moisture within the lower end of the overall package. 20 .for display purposes it is beneficial to use a solid material in order to assist in mounting the packs for display purposes within boxes, containers or the like. Particularly if the two sheets 14 and 18 are relatively tightly sealed at the region where they overlap, the rate of loss of water from the bottom of the pack may be very low, and the flowers can withstand quite considerable periods of time within the pack without attention and without losing their freshness. This is particularly important where flowers have to be transported over con-30 siderable distances and where transportation delays can result in complete loss of a consignment if adequate steps are not taken to ensure that the flowers have permanent The present invention provides a access to water. simple yet highly efficient means of achieving the objects 35 set out above, and in addition creating an attractive and

marketable pack having appeal both to the florist and to the customer.

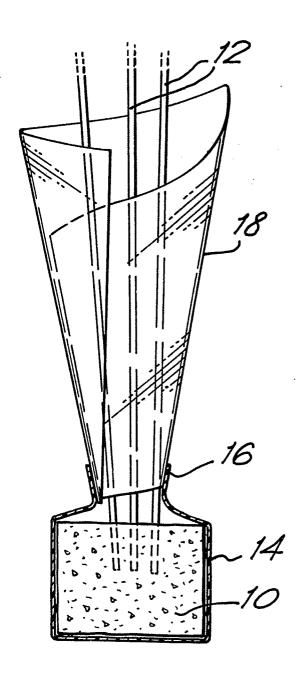
#### CLAIMS :

- 1. A method of packaging flowers which comprises mounting the flowers with their stems in a water-retaining medium, characterised by enclosing the water-retaining medium and at least a substantial length of the flower stems in wrapping material which serves both to encircle and protect the flowers and also to conserve water in the water-retaining medium.
- 2. A method as claimed in claim 1, characterised in that the flowers are first mounted in the water-retaining medium, the medium is then enclosed in a bag of sheet-form wrapping material to define an upstanding collar, and a second piece of sheet-form wrapping

  15 material is then placed around the stems to form a frusto-conical sleeve which has its narrow end in over-lapping relationship with the collar.
- 3. A method as claimed in claim 2, characterised by the step of sealing the two pieces of wrapping
  20 material one to the other in the region of said collar.
- A flower pack comprising a water-retaining medium into which the stems of flowers are arranged to be inserted, characterised by wrapping means arranged both to encircle and protect at least a substantial
   length of the flower stems and also to enclose the water-retaining medium to conserve water therein.
- 5. A flower pack as claimed in claim 4, characterised in that the wrapping means comprises a first piece of sheet-form wrapping material defining a bag for said medium and having an upstanding collar, and a second piece of sheet-form wrapping material defining a frustoconical enclosure for the stems and having its narrow end in overlapping relationship with the collar.
- 6. A flower pack as claimed in claim 5, character— 35 ised in that the two pieces of wrapping material are

sealed one to the other in the region of said collar.

- 7. A flower pack as claimed in claim 4, 5 or
   6, characterised in that different materials are used for the portion of the wrapping means around the stems
   5 on the one hand and the portion of the wrapping means around the water-retaining medium on the other hand.
- 8. A flower pack as claimed in claim 7, characterised in that the wrapping material around the medium is a flexible, waterproof plastics material able
   10 to conform generally to the shape of the medium, and the wrapping material around the stems is a relatively stiff, crisp plastics material resistant to tearing and creasing.
- 9. A flower pack as claimed in any of claims 4
  to 8, characterised in that the water-retaining medium
  comprises a block of inert, porous, rigid, crushable
  material.





# **EUROPEAN SEARCH REPORT**

Application number

EP 81305070.5

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> )	
ategory	Citation of document with indica passages	tion, where appropriate, of relevant	Relevant to claim	
х	<u>US - A - 2 774</u>	187 (SMITHERS)	1,4,5, 7-9	B 65 D 85/50 A 01 G 5/06
	<u>US - A - 4 143</u>	191 (CHAVIS)	1,4,7,	N 01 G 3700
	FR - A1 - 2 272	914 (DUCROT)	1,4,9	
	US - A - 3 552	<u>059</u> (MOORE)	1,2,4,	
				TECHNICAL FIELDS SEARCHED (Int. Cl.3)
				A 01 G 5/00 B 65 B 25/00 B 65 D 85/00
				·
				CATEGORY OF CITED DOCUMENTS
				X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons
				&: member of the same patent
х	The present search report has been drawn up for all claims			family, corresponding document
Place of s	earch UIENNA	Date of completion of the search 14–01–1982	Examiner	MELZER