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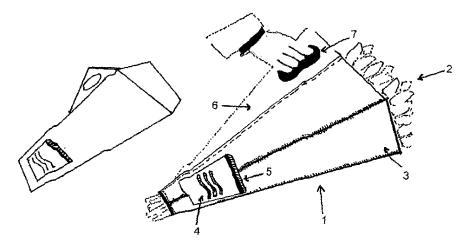


Fig. 1

(57) Abstract: Packaging for flowers manufactured from a sheet into a wrapping for the flowers, which wrapping is provided with a watertight bottom. The watertight bottom is removably attached to the wrapping. The watertight bottom is attached to the wrapping with a connection selected from the group comprising a zipper, a tiewrap, a guiding slot. The watertight bottom comprises polypropylene, preferably recycled polypropylene.



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The invention relates to a packaging for flowers manufactured from a sheet into a wrapping for the flowers.

WO2005/042378 provides an example of such a packaging.

US 6,237,281 discloses a method for wrapping a container, such as a vase containing a floral grouping, with a sheet of material. A connecting bonding material and a closure bonding material are disposed on the sheet of material. The sheet of material is wrapped about the vase causing the connecting bonding material to connect the sheet of material to the vase. The closure bonding material is sealed above the floral grouping to enclose the floral grouping within the sheet of material. The sheet of material may have a second closure bonding material for effecting a vertically sealed area in the sheet of material.

One of the problems with existing packagings, particularly when it concerns packagings of foils of plastic, is that the oceans are flooded with the remainders thereof after the packagings have served their purpose.

It is therefore an object of the invention to provide a high quality packaging which is capable to limit its turning to waste and to abide by the cradle to cradle principle.

It is another object of the invention to provide a packaging with supports the endurance of the flowers that are packaged therein.

It is still another object of the invention to provide a packaging which is capable to provide a message or wish to the receiver.

It is another object of the invention to provide a packaging which is capable for transporting the flowers and maintain delicacy of care during transport of the flowers.

Still another object of the invention is to provide a packaging which requires only little space when it's no longer in use.

A further object of the invention is to provide a packaging which is better equipped to support the flowers packaged therein.

Another object of the invention is to provide a system equipped to accurately monitor a delivery service of the packag-

ing with flowers, or a return system for used packagings.

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These and other objects of the invention are at least in part provided with a packaging and a system according to any one of the appended claims.

According to a first aspect of the invention the wrapping comprises a lid which can be moved out of the plane of the wrapping and provide support for flowers within the wrapping.

In another aspect the wrapping is provided with a watertight bottom. By using such a watertight bottom, water can be provided in the packaging and with the water in the packaging the flowers can endure a longer stay during transport in the packaging or thereafter.

Preferably the watertight bottom is removably attached to the wrapping. The packaging can therefore also be used without wrapping, however with a removable wrapping the material of the wrapping can be tailored to the required needs.

Preferably the watertight bottom comprises polypropylene, preferably recycled polypropylene. The use of virgin polypropylene can thus be avoided.

Suitably the watertight bottom is attached to the wrapping with a connection selected from the group comprising a zipper, a tiewrap, a guiding slot.

To provide an optimal environmental impact it is preferred that also the wrapping comprises polypropylene, preferably recycled polypropylene.

To promote the ease of handling of the packaging of the invention it is preferred that the wrapping comprises a branch arm extending from the wrapping, wherein the branch arm has an aperture that provides a handgrip for handling the wrapping. An advantage of such a branch arm with an aperture serving as a handgrip is that the wrapping as such will not suffer a diminishing diameter during handling which could harm the flowers.

In order to provide a luxury feel it is preferred that the aperture is provided with a softtouch polypropylene inlay.

In order to promote manufacturing efficiency and also sturdiness of the design is preferred that the branch arm is an integral part of the wrapping.

To limit recycling costs and use of energy it is preferred that the wrapping is foldable so as to reduce the packaging's volume. It is found that reduction of the original volume

of the packaging is possible of approximately 99%.

In one embodiment the wrapping is externally writable. This increases the versatility of the packaging in that it provides the user with the option to write a personal message to a recipient of the flowers.

Another preferable feature that adds to the promotional value of the packaging is that the wrapping is printed as a greeting card.

At the same time but also if the packaging has a plain outer appearance, the wrapping is preferably provided with a support for flower feedstock or for supporting a greeting card.

Still another preferred feature of the packaging of the invention is that the wrapping is provided with a machine-readable code or transponder. The packaging provided with such a machine-readable code or transponder can then be suitably applied with a system, such as a track and trace system or a return system for used packagings.

Beneficially the system of the invention comprises a reader for the machine-readable code on the packaging or a send-er/receiver for the transponder that is provided on the packaging.

The invention will hereinafter be further elucidated with reference to the drawing of an exemplary embodiment of an apparatus according to the invention that is not limiting as to the appended claims.

In the drawing:

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-figure 1 shows a transparent side view at a packaging according to the invention; and

-figure 2 shows a Plano from which the packaging of the invention can be made.

Whenever in the figures the same reference numerals are applied, these numerals refer to the same parts.

With reference first to figure 1 a packaging 1 for flowers 2 is shown that is manufactured from a sheet into a wrapping 3 for the flowers 2, wherein the wrapping 3 is provided with a watertight bottom 4. It is remarked that for clarity the packaging 1 is shown as being transparent, albeit that in practice this will likely not at all times be the case, particularly not when the wrapping 3 comprises polypropylene, preferably recycled polypropylene. When using such recycled polypropylene the

wrapping 3 will be black unless it is printed as a greeting card, or otherwise provided with a differing outer appearance.

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Due to the wrapping 3 being shown as transparent it is possible to see that the watertight bottom 4 is removably attached to the wrapping 3 at reference 5. Reference numeral 5 depicts that the watertight bottom 4 is attached to the wrapping 3 with a connection selected from the group comprising a zipper, a tiewrap, a guiding slot. It is of course also possible to provide another connection at reference 5 with which the watertight bottom 4 may be attached to the wrapping 3.

It is preferred that the watertight bottom 4 comprises polypropylene, preferably recycled polypropylene. Particularly when also the wrapping 3 itself is made of recycled polypropylene this promotes the object of the invention to reduce the burden to the environment.

Figure 1 further shows that the wrapping 3 comprises a branch arm 6 extending from the wrapping 3, wherein the branch arm 6 has an aperture 7 that provides a handgrip for handling the wrapping 3. Preferably the aperture 7 is provided with a softtouch polypropylene inlay. This inlay can be provided during manufacturing of the wrapping 3 and is completely clear for the skilled person. A detailed explanation with reference to the drawing can therefore be dispensed with.

It is preferred that the branch arm 6 is an integral part of the wrapping 3 to provide sufficient strength to the construction of the packaging.

Another aspect is that the wrapping 3 is foldable so as to reduce the packaging's volume.

In figure 2 a plano 8 is shown from which the packaging 1 of the invention can be made. The plano 8 shown in figure 2 is manufactured from recycled polypropylene and has therefore a black outer appearance. Against the black background of a packaging 1 manufactured from the plano 8, it is an attractive feature that the wrapping 3 of the packaging 1 is externally writable. Writing on the wrapping 3 can for instance be done with chalk.

Figure 2 further shows that the plane 8 is already provided with a lid 9 that will form part of the eventual wrapping 3 and which can be moved out of the plane of the wrapping 3 to provide support for flowers within the wrapping 3.

It is also possible that the wrapping 3 has a support for flower feedstock or a separate greeting card, for instance if the wrapping 3 is not already provided with the outer appearance of a greeting card.

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PCT/NL2019/050331

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It is also shown in figure 2 that the plane 8 from which the wrapping 3 of the packaging 1 is made has a machine-readable code, in this particular case a QR code 10. It is of course also possible to apply a barcode or to apply a transponder. When the wrapping 3 of the packaging is indeed provided with such a machine-readable code or transponder, the packaging 1 can be effectively incorporated in a track and trace system and/or a return system for used packagings. In that case the system is suitably provided with a reader for the machine-readable code or a sender/receiver for the transponder on the packaging 1. The way this can be implemented is clear to the skilled person and requires no further elucidation.

Although the invention has been discussed in the foregoing with reference to an exemplary embodiment of the packaging and system of the invention, the invention is not restricted to this particular embodiment which can be varied in many ways without departing from the invention. The discussed exemplary embodiment shall therefore not be used to construe the appended claims strictly in accordance therewith. On the contrary the embodiment is merely intended to explain the wording of the appended claims without intent to limit the claims to this exemplary embodiment. The scope of protection of the invention shall therefore be construed in accordance with the appended claims only, wherein a possible ambiguity in the wording of the claims shall be resolved using this exemplary embodiment.

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CLAIMS

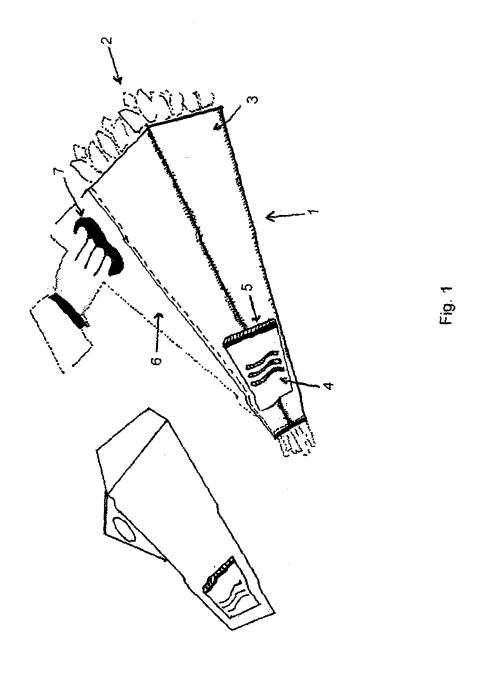
- 1. Packaging (1) for flowers (2) manufactured from a sheet into a wrapping (3) for the flowers (2), characterized in that the wrapping (3) comprises a lid (9) which can be moved out of the plane of the wrapping (3) and provide support for flowers (2) within the wrapping (3).
- 2. Packaging according to claim 1, characterized in that the wrapping (3) is provided with a watertight bottom (4) which is removably attached to the wrapping (3).
- 3. Packaging according to claim 2, **characterized in that** the watertight bottom (4) is attached to the wrapping (3)
 with a connection (5) selected from the group comprising a zipper, a tiewrap, a guiding slot.
- 4. Packaging according to claims 2 or 3, **characterized** in **that** the watertight bottom (4) comprises polypropylene, preferably recycled polypropylene.
- 5. Packaging according to the preamble of claim 1 or according to claim 1, **characterized in that** the wrapping (3) comprises polypropylene, preferably recycled polypropylene.
- 6. Packaging according to the preamble of claim 1 or according to any one of claims 1 5, **characterized in that** the wrapping (3) comprises a branch arm (6) extending from the wrapping (3), wherein the branch arm (6) has an aperture (7) that provides a handgrip for handling the wrapping (3).
- 7. Packaging according to claim 6, **characterized in that** the aperture (7) is provided with a polypropylene inlay providing a soft-touch feel.
- 8. Packaging according to claim 6 or 7, **characterized** in **that** the branch arm (6) is an integral part of the wrapping (3).
- 9. Packaging according to the preamble of claim 1 or according to any one of claims 1 8, characterized in that the wrapping (3) is foldable so as to reduce the packaging's volume.
 - 10. Packaging according to the preamble of claim 1 or according to any one of claims 1-9, **characterized in that** the wrapping (3) is externally writable.
 - 11. Packaging according to the preamble of claim 1 or according to any one of claims 1 10, characterized in that the

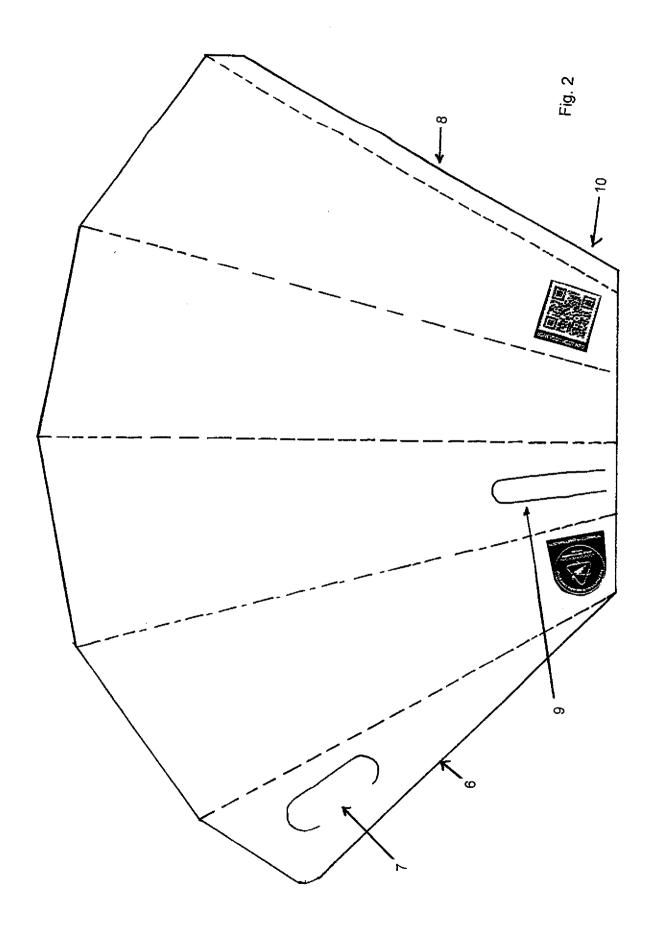
wrapping (3) is printed as a greeting card.

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- 12. Packaging according to the preamble of claim 1 or according to any one of claims 1-11, **characterized in that** the wrapping (3) has a support for flower feedstock or a greeting card.
- 13. Packaging according to the preamble of claim 1 or according to any one of claims 1-12, **characterized in that** the wrapping (3) is provided with a machine-readable code (10) or transponder.
- 14. System incorporating the packaging of any one of claims 1 13, **characterized in that** the system is one of a track and trace system and a return system for used packagings.
 - 15. System according to claim 14 incorporating the packaging of claim 13, **characterized in that** the system comprises a reader for the machine-readable code (10) or a sender/receiver for the transponder.





INTERNATIONAL SEARCH REPORT

International application No PCT/NL2019/050331

a. classification of subject matter INV. B65D85/50

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

claims 1-9; figures 1-4

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 5 991 999 A (WEDER DONALD E [US]) 30 November 1999 (1999-11-30) column 4, line 17 - line 53 column 7, line 42 - column 8, line 5; claims 1-14; figures 1-4	1,2,4,5, 7-11,13
Х	US 6 351 912 B1 (WEDER DONALD E [US]) 5 March 2002 (2002-03-05) column 1, line 58 - column 2, line 40 column 3, line 44 - column 4, line 48; claims 1-64; figures 1-6	1,2,4,5, 7-11,13
Х	US 5 815 905 A (WEDER DONALD E [US]) 6 October 1998 (1998-10-06) column 4, line 17 - line 53 column 7, line 41 - column 8, line 6;	1,2,4,5, 7-11,13

X Further documents are listed in the continuation of Box C.	X See patent family annex.	
* Special categories of cited documents : "A" document defining the general state of the art which is not considered	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
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"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family	
Date of the actual completion of the international search	Date of mailing of the international search report	
21 August 2019	30/08/2019	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer	
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INTERNATIONAL SEARCH REPORT

International application No
PCT/NL2019/050331

tegory* Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT tegory* Citation of document, with indication, where appropriate, of the relevant passages US 2 774 187 A (SMITHERS VERNON L) 18 December 1956 (1956-12-18) column 2, line 6 - line 17 column 2, line 62 - line 70; claims 1-5; figures 1-4	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NL2019/050331

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5991999 A	30-11-1999	US 5991999 A US 6021558 A US 6131264 A US 6321435 B1 US 2002023336 A1 US 2003097743 A1	30-11-1999 08-02-2000 17-10-2000 27-11-2001 28-02-2002 29-05-2003
US 6351912 B1	05-03-2002	NONE	
US 5815905 A	06-10-1998	US 5815905 A US 5974651 A US 6182348 B1 US 2002046457 A1 US 2003029017 A1 US 2004083592 A1 US 2005246959 A1	06-10-1998 02-11-1999 06-02-2001 25-04-2002 13-02-2003 06-05-2004 10-11-2005
US 2774187 A	18-12-1956	NONE	