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(30) Priority: **31.07.2003 US 492047 P**

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(54) **Fragile-product cage for vacuum packaging appliances**

(57) In order to protect the structural integrity of fragile products during the process of vacuum packaging, a protective cage is used. The protective cage may be constructed using a membrane supported by a suitable frame. In addition, the protective cage may include a suitable mechanism to allow gas to exit the protective

cage during the process of vacuum packaging. Further, the protective cage may be adapted to have a variable size, and thus may be adjusted to a desired size. To protect fragile products, the frame and the membrane are such that they, in combination, provide sufficient resistance to compressive forces that might occur during the vacuum packaging process.

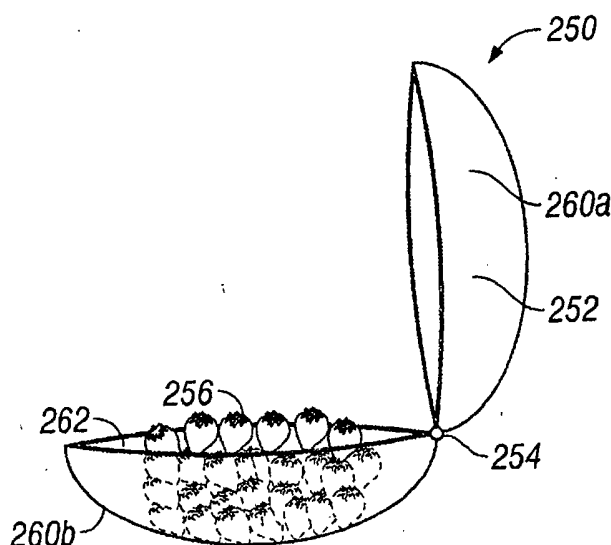


FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 04 25 4554

DOCUMENTS CONSIDERED TO BE RELEVANT			
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 January 2005	Examiner Bevilacqua, V
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03 82 (P04C01)



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EUROPEAN SEARCH REPORT

Application Number
EP 04 25 4554

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 January 2005	Examiner Bevilacqua, V
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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Application Number

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 04 25 4554

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-10,15-25,30-32

A cage for protecting fragile products when said products are vacuum packaged in a flexible storage container using a vacuum package appliance, the cage comprising a membrane and a frame for supporting said membrane whereby the cage comprises a first portion and a second portion interconnected by a hinge or a clamp or a clasp and a method of using this cage

2. claims: 11-14,26-29

A cage for protecting fragile products when said products are vacuum packaged in a flexible storage container using a vacuum package appliance, the cage comprising a membrane and a frame for supporting said membrane whereby the cage includes elements for allowing gases to be evacuated and a method of using this cage

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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10-01-2005

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