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(54) **REFILL DEVICE**

(57) The present invention discloses a refill device, comprising a case body (31), wherein the case body (31) has an opening end (311), a first case body (312) and a case bottom (32); the case bottom (32) is integrally formed with the first case body (312); the case bottom (32) of the case body (31) is provided with a first cutting line (34) for enclosing a portion to form a bottom bracket (35); and the bottom bracket (35) is separable from the case bottom (32) along the first cutting line (34) under the action of an external force. The case bottom (32) of the present invention is integrally formed with the first case body (312), and the first cutting line (34) is provided on the case bottom (32) to form a separable bottom bracket (35), which is used in cooperation with the packaging device in the embodiment of the present invention, so that the packaging device can be reused. Integrally forming the case bottom (32) and the first case body (312) reduces the number of accessories, reduces the production cost of the product and improves the production efficiency, while reducing the logistics cost and the production cost of the filling line.

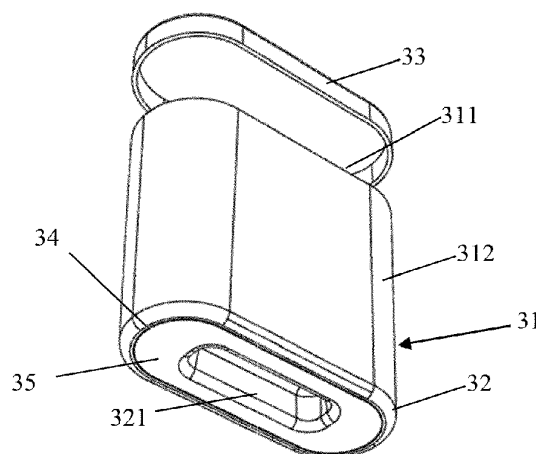


Fig. 2



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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 August 2023	Examiner Frank, Lucia
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EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 August 2023	Examiner Frank, Lucia
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Place of search	Date of completion of the search	Examiner
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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due 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 those claims for which no payment was due.

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:

1-11, 15

☐ 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:

☐ The present supplementary 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 (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION **SHEET B**

Application Number

EP 22 21 2007

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: 1-4, 15

A refill device with a break-away bottom bracket, comprising a cutting line of certain characteristics

1.1. claims: 1, 2, 4

A refill device with a break-away bottom bracket, comprising a cutting line of a certain location

1.2. claims: 1, 3

A refill device with a break-away bottom bracket, comprising a cutting line of a certain depth

1.3. claims: 1, 15

A refill device with a break-away bottom bracket, the refill device being configured for a certain use

2. claims: 5-8

A refill device with a break-away bottom bracket, comprising a lid or a sealing film

3. claims: 9-11

A refill device with a break-away bottom bracket, being made of a certain material

4. claim: 12

A refill device with a break-away bottom bracket, comprising a hole in the bottom bracket

5. claim: 13

A refill device with a break-away bottom bracket, comprising a case body presenting ribs

6. claim: 14

A refill device with a break-away bottom bracket, comprising a case body of a certain shape



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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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:

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Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

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

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