

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2024/080943 A1

(43) International Publication Date
18 April 2024 (18.04.2024)

WIPO | PCT

(51) International Patent Classification:

A45C 11/20 (2006.01) B65D 5/42 (2006.01)
B65D 5/36 (2006.01) B65D 5/24 (2006.01)

(21) International Application Number:

PCT/TR2022/051230

(22) International Filing Date:

02 November 2022 (02.11.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

TR2022/015495 11 October 2022 (11.10.2022) TR

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: A FOOD BOX

(57) Abstract: The invention is related to a food box to be used in the convenience food sector, which provides both a lock function and housing for the food utensils to be used.

WO 2024/080943 A1

DESCRIPTION

A FOOD BOX

5 **Technical Field of the Invention**

The invention is related to a food box to be used in the convenience food sector, which provides both a lock function and housing for the food utensils to be used.

10 **State of the Art of the Invention**

The use of disposable boxes made of paper and paper products in the food sector is very high. The said boxes are used by the restaurant during the transportation to the consumer after the meal/food is prepared.

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Generally, the meal/food is sent to the consumer with forks, spoons, knives, and chopsticks. To carry these food utensils easily, the order is sent in a bag as well as a box.

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To eliminate the need for this extra bag, the relevant food utensils can be placed inside the meal/food boxes, however, this solution also reduces the volume saved for the food/meal in the box and is therefore not preferred. In addition, various solutions have been used to place food utensils in slots or housings provided outside the box.

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Another important problem with food boxes is the problems experienced in closing the box securely. Lids are used to keep the mouth of the box closed during transportation, and adhesive tapes or snap-on systems are used to keep these lid parts closed.

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Although there are separate solutions for the two problems mentioned above, there is no study on a single structure that can provide a solution to both of these problems.

As a result, all the above-mentioned problems have made it necessary to make an innovation in the related technical field.

Objects and Brief Description of the Invention

The main object of the invention is to present a food box that will prevent the food box from being opened during transportation and form a housing where food utensils such as forks, spoons, knives, and chopsticks can be placed.

The present invention is related to material for forming a food transportation box that meets the above-mentioned requirements and purposes. Accordingly, the present invention comprises a body having a rim, a base edge, and connecting edges that form the volume in which the food will be placed by connecting each other, the main lid arranged around the rim, which closes the mouth when the tip edges come into contact with each other when folded towards the rim, at least two primary lids which have at least one lock extension provided at the contacting tip of the main lid and which comes into surface-to-face contact with each other when bent in the opposite direction of the main lid, at least one secondary lid which has at least one lock slot arranged around the rim and between said primary lids, into which said lock extension will be taken when bent towards the rim, the main slot on the primary lids that allows the primary lids to be fixed to each other by slipping an object on.

Thereby, the said main slot provides both housing for the utensil, and a lock function that connects the main lids of the said utensil. In addition, the utensil will not prevent the main lids from sliding in its extension direction, even if it prevents the main lid movements outside the axes in the direction of their extension, and for this reason, a lock extension is provided with the said main lids and these lock extensions prevent the main lids from being opened in the direction of the utensil extension by passing through the lock slots of the secondary lids.

Description of the Figures Describing the Invention

The figures and their related description used in order to better explain the device developed with this invention are given below.

Figure 1. Top view of an embodiment of the material of the invention

Figure 1a. Top view of another embodiment of the material of the invention

Figure 1b. Isometric view of the box obtained by installing the material in Figure 1

Figure 1c. Top view of Figure 1b

Figure 2. Representative isometric view of the bottom part of the box of the invention

Definitions of Elements/Parts/Pieces Forming the Invention

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In order to better explain the device developed with this invention, the parts and sections in the figures are numbered, and the corresponding of each number is given below.

K. Box

- 10 **10.** Body
11. Rim
12. Connecting edge
13. Base edge
14. Housing wall
15 **141.** Housing slot
15. Collar
20. Primary lid
21. Main lid
211. Lid connecting edge
20 **22.** Slot extension
221. Main slot
23. Lock extension
30. Secondary lid
31. Lock slot
25 **40.** Base
P. Lid part

Detailed Description of the Invention

- 30 The invention is related to a food box to be used in the convenience food sector, which provides both a lock function and housing for the food utensils to be used.

Referring to Figure 1-1c; said box (K) is obtained by installing a planar material, preferably a material made of paper or cardboard and similar paper products. Said material is preferably provided as one piece and has been cut to obtain suitable geometric shapes to form said box (K). Said material is made of paper or cardboard and similar paper products.

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Said material is constructed on a planar body (10). Said body (G) is preferably in the form of a quad, in particular rectangular. Two of the opposite sides of the said body are defined as the rim (11) and the base edge (12), respectively, and the other two opposite edges are defined as the connecting edges (13).

10

When the said connecting edges (13) are connected, the body (10) forms a shell form with a volume inside, as can be seen in Figure 1b. Here, during the connection of the connecting edges (13), the body (10) can be bent optionally in such a way that the shell can form in different geometries, such as a rectangular prism, cylindrical form, and the like.

15

At the rim (11) there are at least two primary lids (20) and at least one secondary lid (30). In the preferred embodiment, the material constituting the box (K) includes two primary lids (20) and two secondary lids (30). The primary lid (20) and the secondary lid (30) are provided in connection with the rims (11). This is provided in a bendable way from the part where it is connected to the rim (11) of both lids.

20

The primary lid (20) includes the main lid (21). The main lid (21) is the part where the primary lid (20) is connected to the rim (11) and when it is bent towards the mouth, it comes into contact with the other main lid (21) and closes the mouth as in Figure 1a. The overall size and geometric form of the main lids (21) can be provided to completely cover the mouth, or a collar (15) is provided at the mouth as in Figure 1c and the main lids (21) are formed and sized to cover the parts left open by the collar (15).

25

There is at least one lock extension (23) on the lid connecting edge (211), that is, on the ends facing each other, which is not connected to the rim (11) of the main lids (21). Said lock extensions (23) are bent in the opposite direction of the main lid (21) to which they are attached to close the mouth, and accordingly, when the main lids (21) close the mouth, they are positioned at an angle of 90 degrees or approximately 90 degrees to the main lids (21) and

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two lock extension (23) surfaces contact each other. The lock extensions (23) that contact each other's surfaces are not connected.

5 Between said primary lids (20), there is a lock slot (31) on a secondary lid (30) also provided at the rim (11). Said secondary lid (30) is provided as bendable from the rim (11) and after the primary lids (20) close the mouth, the secondary lid (30) is folded over the primary lids (20) in such a way that the lock slot (31) fits into the lock extension.

10 If the main lids (21) each contain two lock extensions (23), each of the two secondary lids (30) on the material contain a lock slot (31) on which the said lock extensions (23) will rest. The two lock extensions (23) and the lock slot (31) are useful for holding the main lids (21) from both ends and accordingly opening the same from the tips.

15 The primary lids (20) each comprise a main slot (221). Said main slot (221) is arranged so that a utensil, for example, a fork, spoon, knife, and chopstick can pass. For example, the main slot (221) is sized so that the handle portion of a fork can pass but the tip thread cannot pass. When one of the said utensils is passed through the main slots (221), the said main utensil fixes the primary lids (20) to each other. At this point, the utensil passing through the main slot (221) cannot effectively prevent the movement of the primary lids (20) in its
20 extension direction, accordingly, the movements that the utensils cannot restrict are restricted by the lock extensions (23) and the lock slots (31) where the said lock extensions (23) rest.

In one embodiment, said main slots (221) are formed on main lids (21). The utensil passes through both main slots (221) respectively. In this embodiment, since the main lids (21) are
25 positioned parallel or approximately parallel to each other in the closed position, the utensil cannot be placed in the main slots on a straight axis. At this point, while the utensil is passed through the main slots (221), the movement axis does not remain constant and is carried out with a twisting motion, which can cause the parts where the main slots (221) are used to tear.

30 In a preferred embodiment, a slot extension (22) is arranged on the lid connecting edge (211) of the main lids (21). The said slot extension (22) is arranged so that it can be folded from the lid connecting edge (211). Said lock extensions (22) are bent in the opposite direction of the main lid (21) to which they are attached to close the mouth, and accordingly, when the main

lids (21) close the mouth, they are positioned at an angle of 90 degrees or approximately 90 degrees to the main lids (21) and two lock extension (22) surfaces contact each other. The lock extensions (22) that contact each other's surfaces are not connected.

- 5 Said main slots (221) are provided on slot extensions (22). At this point, the main slots (221) are arranged to overlap when the slot extensions (221) touch each other's surfaces. Accordingly, the utensil can move in a single movement axis and enter the main slots (221), thereby eliminating the possibility of tearing the main slots (221).
- 10 If two lock extensions (23) are provided, preferably, said slot extension (22) is positioned between the lock extensions (23). As can be seen in Figure 1a, said slot extension (22), preferably the lock extensions (23) are provided in one piece and can also be arranged to be folded together from the lid connecting edge (211).
- 15 As mentioned before, the body (10) forms the volume where the food will be placed by connecting the connecting edges (12) on the two opposite sides to each other. At this point, the connecting edges (12) can be connected in the form of adhesive, adhesive tape, and the like. At this point, said connecting edge (12) can be provided to divide said primary lid (20) or secondary lid (30) and divide said primary lid (20) or secondary lid (30) into lid parts (P)
- 20 that constitute said lids. When the said lid parts (P) are combined from the body connecting edges (12), they form the primary lid (20) or the secondary lid (30) depending on the position where the connecting edge is provided. Alternatively, the connecting edge may be provided on an axis that does not cut the primary lid (20) or the secondary lid (30).
- 25 If the axis of the connecting edge (12) is provided so that it passes over the lock slot (31) in the secondary lid (30), the two lid parts (P) may contain slots to form the lock slot (31) as in Figure 1a, or each lid part (P) includes a full lock slot (31) and is positioned from the connecting edge (12) in such a way that the lock slots (31) overlap each other during joining.
- 30 Similarly, if the axis of the connecting edge (12) is provided so that it passes over the main slot (221) in the primary lid (20), the two lid parts (P) may contain slots to form the main slot (31) or each lid part (P) includes a full main slot (221) and is positioned from the connecting edge (12) in such a way that the lock slots (31) overlap each other during joining.

Referring to Figure 2; a housing wall (14) extending along the base edge may be formed at the bottom edge (13). Said housing wall (14) forms a distance between the base (40) and the ground. At this point, the housing wall (14) forms a housing function in the base (40) for a tissue or similar object. When the object is placed on the base (40), the housing wall both restricts the movement of the object and prevents the box (K) from being unstable.

Preferably, there is at least one, preferably more than one housing slot (141) on the housing wall (14). Said housing slot (141) is positioned close to the bottom edge (13), longitudinally to the box (K), and between the base edge (13) and the base (40). Said housing slots (141) are preferably distributed on the housing wall (14) in such a way that the corners of a rectangular package, for example, a wet wipe package or a spice package, are located. The box (K) may also be arranged longitudinally so that a plurality of housing walls (141) holds more than one package.

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In the invention, the base (40) can be provided directly to the aforementioned material in one piece, or it can be a separate piece placed on the base edge (13) while the box (K) is being installed or after it is installed.

CLAIMS

1. A material for forming a box (A) suitable for carrying food, characterized in that it comprises;
5 a body (10) having a rim (11), base edge (13) and connecting edges (12) which, form a volume where the food will be placed by connecting each other,
at least two primary lids (20) having the main lid (21) arranged around the rim (11), which closes a mouth when the tip edges come into contact with each other when folded towards the mouth, at least one lock extension (23) provided at the tip where
10 the main lids (21) contact, and contact with each other's surface, when folded in the opposite direction of the main lid (21),
at least a secondary lid (30) arranged around the rim (11) and between said primary lids (20), having at least one lock slot (31) where said lock extension (23) will be placed when it is bent towards the mouth,
15 the main slot (221) on the primary lids (20) that allows the primary lids (20) to be fixed to each other by threading of an object.
2. A material according to Claim 1, characterized in that it comprises two secondary lids (30) having two lock extensions (23) and a lock slot (31) is placed on said lock
20 extensions (23).
3. A material according to Claim 1 or 2, characterized in that the said main lids (21) comprise a slot extension (22) provided at the tip where the main lids (21) contact each other and contacting each other's surface when bent in the opposite direction of
25 the main lid (21) and on which said main slots (221) are provided.
4. A material according to any one of the above claims, characterized in that the said main slot (221) is provided in parallel to the tip where the main lids (22) contact.
- 30 5. A material according to Claim 1, characterized in that the axis of the connecting edges (12) extends such that they divide the secondary lid (30).

6. A material according to Claim 5, characterized in that each secondary lid part (P) divided comprises a lock slot (31).
- 5 7. A material according to Claim 6, characterized in that the lock slots (31) on the lid parts (P) are provided such that they will overlap when the connecting edges (12) are connected.
8. A material according to Claim 5, characterized in that each secondary lid part (P) divided comprises a recess to form the lock slot (31) in the connecting edges (12).
- 10 9. A material according to Claim 1, characterized in that the axis along which the connecting edges (12) extend is provided so that they divide the primary lid (21).
10. A material according to Claim 9, characterized in that each primary lid (20) part divided comprises the main slot (221).
- 15 11. A material according to Claim 10, characterized in that the main slots (221) on the primary lid (20) parts are provided such that they will overlap when the connecting edges (12) are connected.
- 20 12. A material according to Claim 9, characterized in that each secondary lid part (P) divided comprises a recess to form the lock slot (31) in the connecting edges (12).
13. A material according to Claim 1, characterized in that it comprises a housing wall (14) to form an extension such that a distance is created between the base (40) and the ground longitudinally to the base edge (13).
- 25 14. A material according to Claim 1, characterized in that it comprises at least one housing slot (141) on the said housing wall (14).
- 30 15. A material according to Claim 14, characterized in that it comprises more than one housing slot (141).

- 16.** A material according to Claim 1, characterized in that it is made of paper.
- 17.** A material according to Claim 16, characterized in that it is made of cardboard.
- 5 **18.** A material according to Claim 16 or 17, characterized in that it is made of a material suitable for food contact.

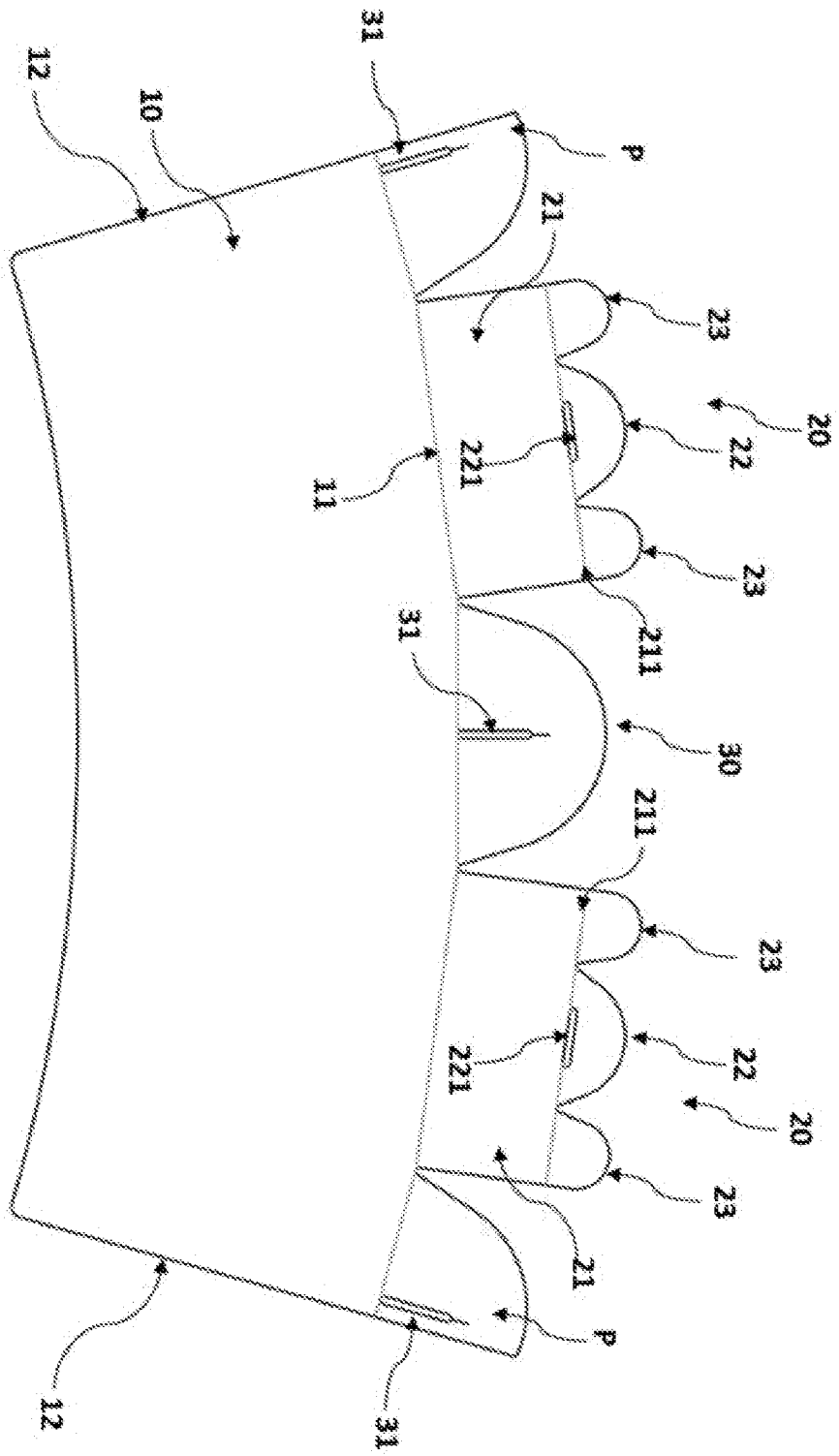


FIGURE 1

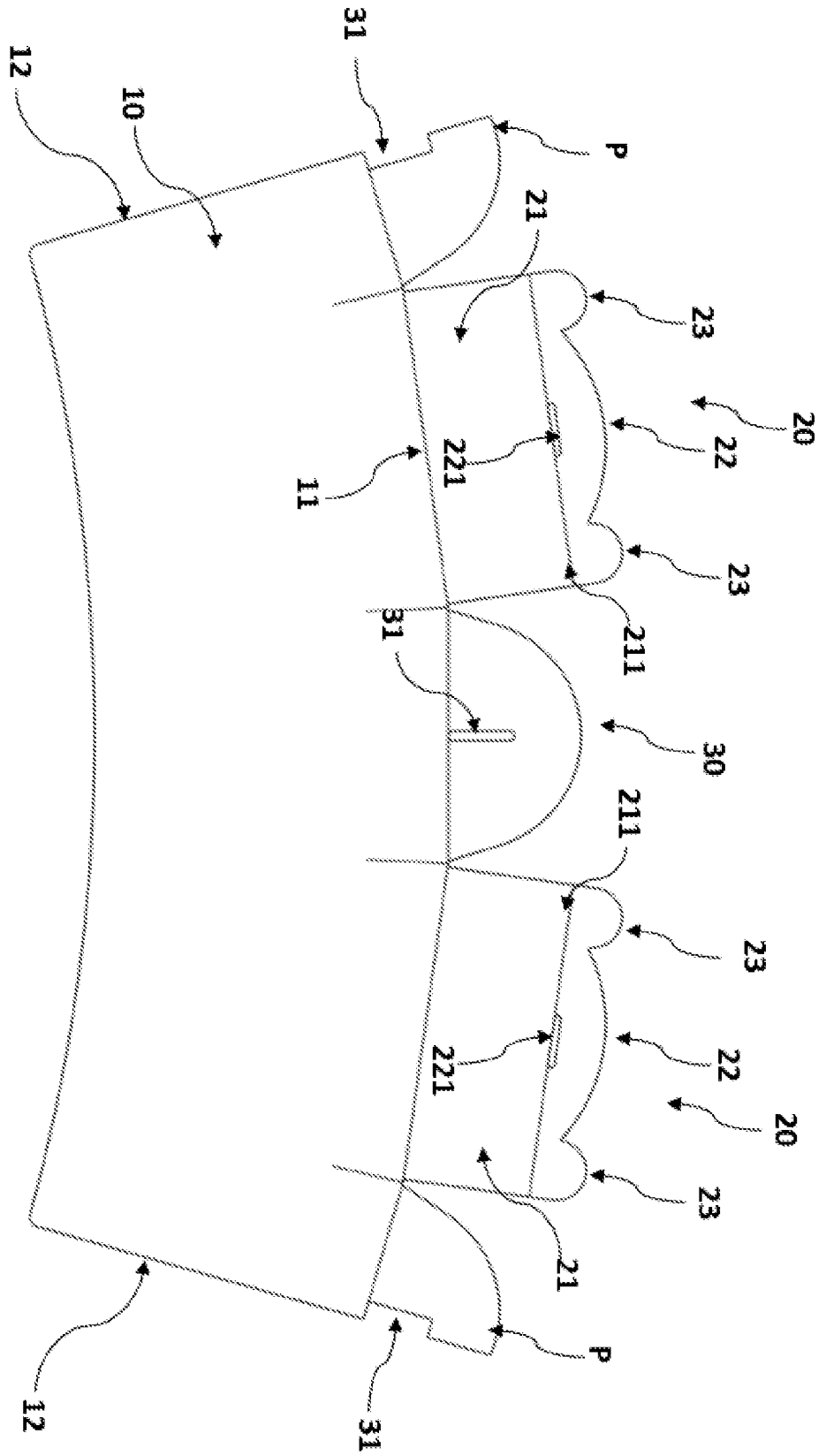


FIGURE 1a

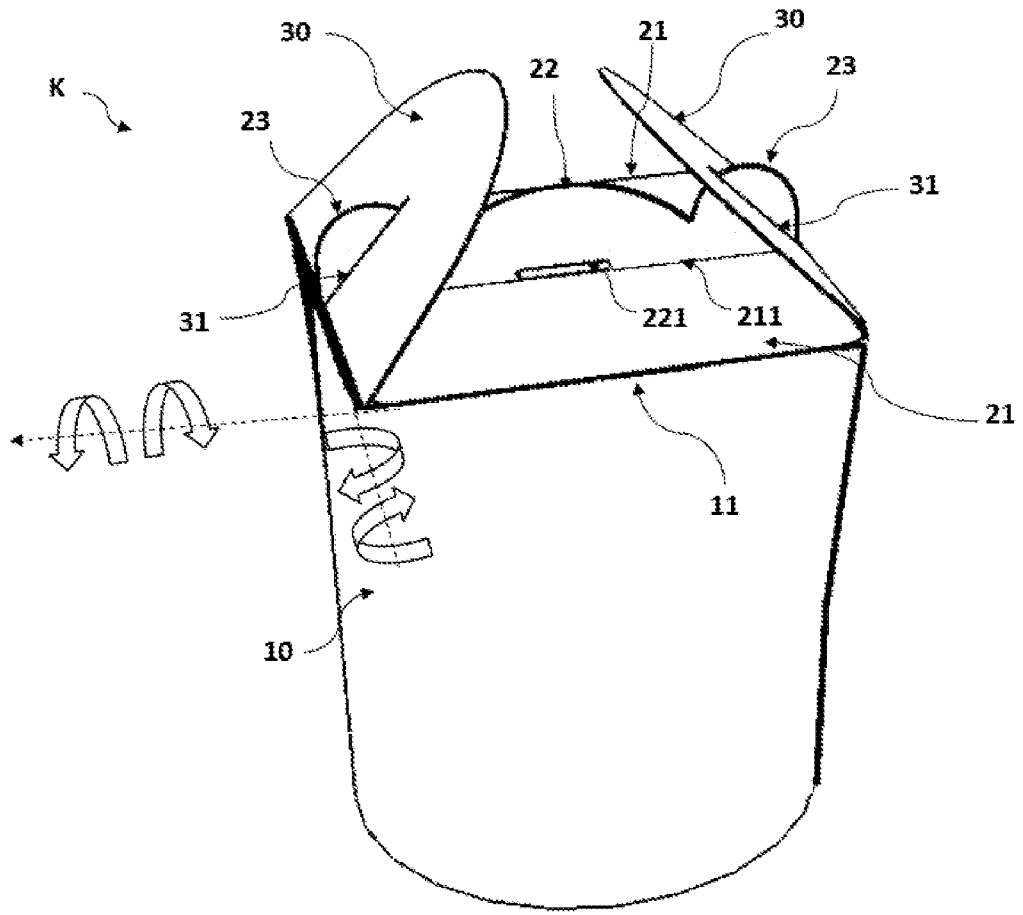


FIGURE 1b

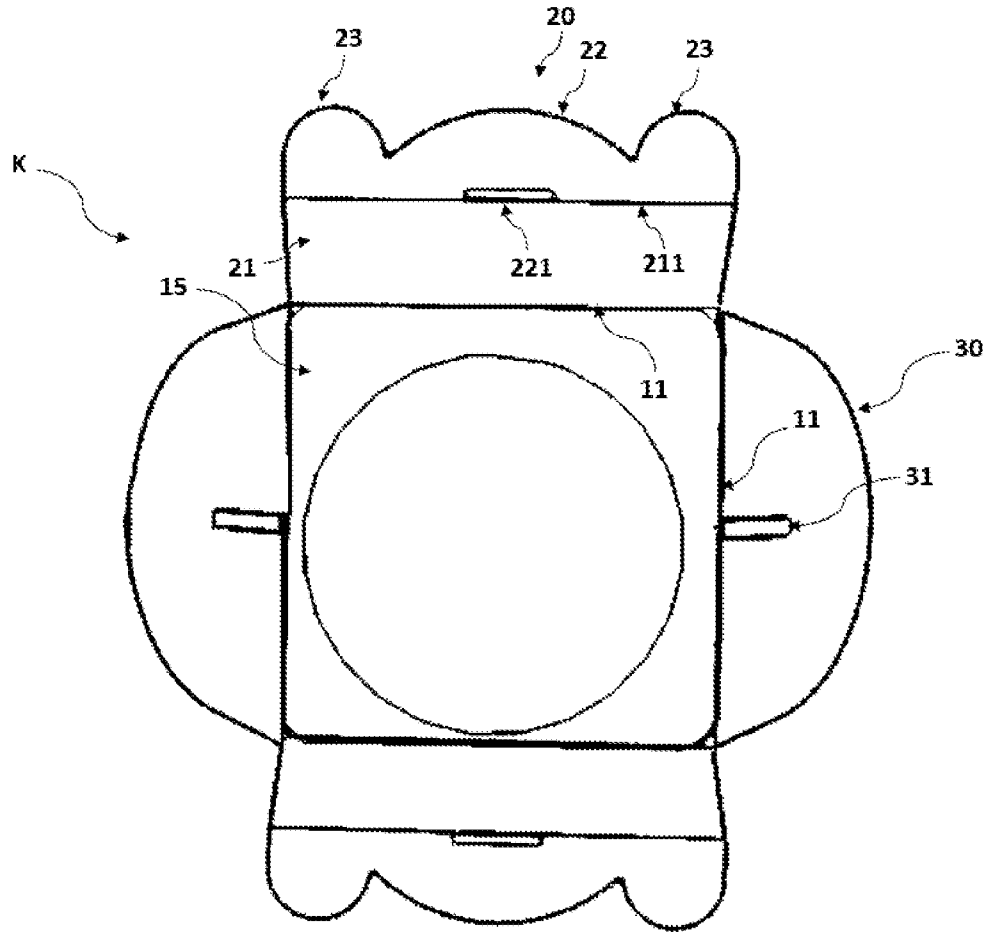


FIGURE 1c

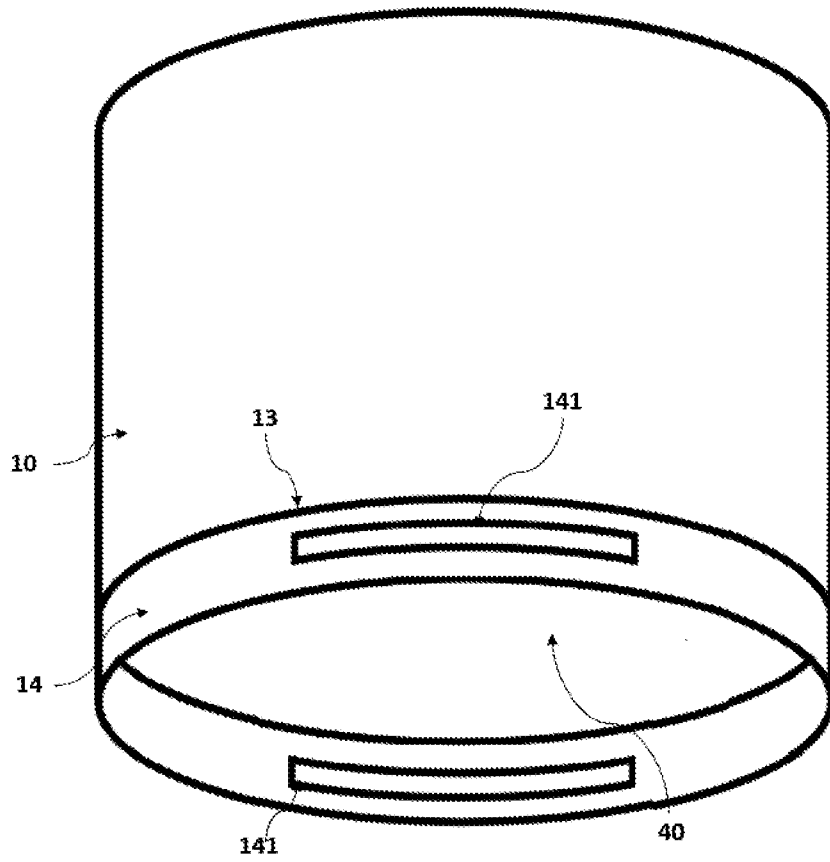


FIGURE 2

INTERNATIONAL SEARCH REPORT

International application No.

PCT/TR2022/051230

A. CLASSIFICATION OF SUBJECT MATTER		
A45C 11/20 (2006.01)i; B65D 5/36 (2006.01)i; B65D 5/42 (2006.01)i; B65D 5/24 (2006.01)i		
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) A45C; B65D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched TURKPATENT Patent Databases		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO Abstract & Fulltext Databases & Keywords: food, meal, box, container, takeaway case, lid, lock, slot, utensils		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 2255075 A (SHENG DESIGN & PRINTING CO LTD [CN]) 28 October 1992 (1992-10-28) Abstract, Figure 5	1-18
Y	TW M290866 U (TSAI SHR-RUNG [TW]) 21 May 2006 (2006-05-21) Abstract, Figures 1-3	1-18
Y	US 2001004088 A1 (LAU BOON WEE) 21 June 2001 (2001-06-21) Abstract, Figures 2, 4	1-18
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "D" document cited by the applicant in the international application "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 09 June 2023		Date of mailing of the international search report 09 June 2023
Name and mailing address of the ISA/TR Turkish Patent and Trademark Office (Turkpatent) Hipodrom Caddesi No. 13 06560 Yenimahalle Ankara Türkiye Telephone No. +903123031000 Facsimile No. +903123031220		Authorized officer Erdal TEKİN Telephone No. +903123031587

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/TR2022/051230

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				JP	2001225830	A	21 August 2001
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