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Tray for conveying cup and container

Abstract

The present invention is to provide a tray for conveying a cup and a container, which is coupled to a cup holder and is capable of stably conveying multiple cups and containers in a simple structure by effectively preventing a motion of the cup, and may include: a body part having a space accommodating at least one of a cup or a food; and at least one fastening unit positioned on one side of the body part and into which a protrusion of an external member (a cup and a container) is inserted and coupled into, and the fastening portion has a slit or a cutting line having a clamp shape.

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References Cited

U.S. PATENT DOCUMENTS

| Patent No. | Issued Date | Patentee Name | U.S. Cl. | CPC |
|------------|--------------------|----------------------|----------|--------------|
| 1757141 | 12/1929 | Raster | 220/533 | B65D 25/04 |
| 3107028 | 12/1962 | De Robertis | 215/396 | A47G 23/0216 |

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Background/Summary

TECHNICAL FIELD

- (1) The present invention relates to a tray for conveying a cup and a container, which is used for easily conveying multiple cups and containers, and particularly, to a tray for conveying a cup and a container, which is coupled to a cup holder and a dish (vessel) and effectively prevents motions of the cup and the container to stably convey multiple cups and containers only by a simple structure. BACKGROUND ART
- (2) In recent years, the number of take-out type coffee shops has been increasing. The coffee shop provides a cup carrier and tray for conveniently conveying multiple cups when one or more cups of coffee is ordered, and the cup carrier and tray becomes a major necessity that should be provided in the coffee shop.
- (3) That is, the take-out type coffee shop can sell one or more cups of coffee according to an order of a customer. In this case, it may be difficult that one customer moves while holding one or more cups. In particular, it may be difficult for one person to hold and convey two or more cups containing hot and cold coffee with both hands.
- (4) As a result, the coffee shop uses the cup carrier and tray for a purpose in which one customer can easily convey multiple cups.
- (5) A commonly used disposable cup carrier and tray may have a box type or tray type structure in which a paperboard is pasted with a glue or an adhesive or a tray type structure in which a pulp is poured into a mold and solidified by a scheme of making an eggbox panel.
- (6) However, in the case of the cup and tray, a cost weight of a raw material required for production of the cup carrier and tray is large and a manufacturing process is complicated, so manufacturing cost depending on a process becomes large and a volume of a finished product is large, and as a result, costs such as packing cost, conveying cost, and storage cost are largely consumed.
- (7) As such, the cup carrier and tray made by the existing used scheme has various problems including a problem that the cup carrier and tray is complicated in terms of the structure and

manufacturing process thereof, so a price cannot but be large as a disposable consumable, a problem that the cup carrier tray is inconvenient, and a problem that a weight of logistics cost becomes too large due to a large volume.

DISCLOSURE

Technical Problem

- (8) An object of the present invention is to provide a tray for conveying a cup and a container, which is coupled to a cup holder or a dish (container) and effectively prevents motions of the cup and the container to stably convey multiple cups only by a simple structure.
- (9) An object of the present invention is to provide a tray for conveying a cup and a container, which is coupled to a cup holder and effectively prevents the motion of the cup to be immediately used without a manufacturing process and does not occupy a large volume in a simple structure of a plate shape and is simple in terms of the manufacturing process to save cost.
- (10) An object of the present invention is to provide a tray for conveying a cup and a container, which can save a material and more stably support the cup and the dish (container) in a simple and robust structure.
- (11) An object of the present invention is to provide a tray for conveying a cup and a container which can provide a beverage and dessert in a space when purchasing both the beverage and the dessert.
- (12) The objects of the present invention are not limited to the above-mentioned objects, and other objects and advantages of the present invention that are not mentioned can be understood by the following description, and will be more clearly understood by embodiments of the present invention. Further, it will be readily appreciated that the objects and advantages of the present invention can be realized by means and combinations shown in the claims.

Technical Solution

- (13) In order to achieve the object, a tray for conveying a cup and a container according to the present invention may include: a body part having a space accommodating at least one of a cup or a food; and at least one fastening unit positioned on one side of the body part and into which a protrusion of an external member (a cup and a container) is inserted and coupled into, and the fastening portion has a slit or a cutting line having a clamp shape, and the fastening portion may have a slit or a cutting line having a clamp shape.
- (14) Preferably, the tray for conveying a cup and a container may further include a fixation bar penetrated, inserted, and fastened into the fastening portion to form at least one pole to protrude upwards from a bottom surface of the body part.
- (15) Preferably, the fixation bar may be provided as a plate part having a predetermined width, and include a folding line having a predetermined distance while both centers correspond to each other, and further include a folding line slantly inwards of the center by extending the folding line. Advantageous Effects
- (16) The tray for conveying the cup and the container according to the present invention described above has the following effects.
- (17) First, the tray for conveying the cup and the container according to the present invention is coupled to the cup holder and effectively prevents the motion of the cup to stably convey multiple cups only by a simple structure.
- (18) Second, the tray for conveying the cup and the container according to the present invention can be immediately used without the manufacturing process and does not occupy a large volume in the simple structure of the plate shape and is simple in terms of the manufacturing process to save cost.
- (19) Third, the tray for conveying the cup and the container according to the present invention can save a material and more stably support the cup and the container in a simple and robust structure.
- (20) Fourth, when both the beverage and the dessert are purchased, there is inconvenience in that a cup carrier and a dessert carrier should be separately provided at present, and the tray for

conveying the cup and the container according to the present invention as a carrier in which the cup holder and the tray are coupled can provide the beverage and the dessert in one space when taking out the beverage and the dessert.

(21) In addition to the above-described effects, the specific effects of the present invention will be described below together while describing the specific matters for the present invention.

Description

DESCRIPTION OF DRAWINGS

- (1) FIGS. **1***a*, **1***b*, and **1***c* are perspective views illustrating a configuration of a tray for conveying a cup and a container according to an embodiment of the present invention.
- (2) FIGS. **2***a* and **2***b* are perspective views illustrating a state in which a cup holder and a container is accommodated in the tray for conveying a cup and a container according to the embodiment illustrated in FIGS. **1***a*, **1***b*, and **1***c*.
- (3) FIGS. **3***a* and **3***b* illustrate a first embodiment for describing that the tray for conveying a cup and a container in FIG. **1** is fastened by using first and second coupling units.
- (4) FIGS. **4***a* and **4***b* illustrate a second embodiment for describing that the tray for conveying a cup and a container in FIG. **1** is fastened by using the first and second coupling units.
- (5) FIG. **5** is a perspective view illustrating a state in which the tray for conveying a cup and a container is folded in order to storage the tray for conveying a cup and a container according to the embodiment of the present invention.
- (6) FIG. **6** is a perspective view illustrating a configuration of a tray for conveying a cup and a container according to another embodiment of the present invention.
- (7) FIGS. **7***a* and **7***b* are configuration diagrams specifically illustrating a configuration of a fixation bar in FIG. **6**.
- (8) FIG. **8** is a configuration diagram illustrating a configuration in which a fixation bar and a cup holder are coupled to a body part in FIG. **6**.
- (9) FIG. **9** is a perspective view illustrating a state in which a cup and a food are accommodated in a tray for conveying a cup and a container according to another embodiment of the present invention.

MODES FOR THE INVENTION

- (10) Other objects, characteristics, and advantages of the present invention will become apparent through the detailed description of the embodiments referred to in the accompanying drawings.
- (11) Terms used in the present invention adopt general terms which are currently widely used as possible by considering functions in the present invention, but the terms may be changed depending on an intention of those skilled in the art, a precedent, emergence of new technology, etc. Further, in a specific case, a term which an applicant arbitrarily selects is present and in this case, a meaning of the term will be disclosed in detail in a corresponding description part of the invention. Accordingly, a term used in the present invention should be defined based on not just a name of the term but a meaning of the term and contents throughout the present invention.
- (12) A preferred embodiment of a tray for conveying a cup and a container according to the present invention will be described below with reference to the accompanying drawings. The present invention is not limited to an embodiment disclosed below but may be implemented in various different shapes and the present embodiment just completes a disclosure of the present invention and is provided to completely inform a scope of the present invention to those skilled in the art. Accordingly, configurations illustrated in the embodiments and drawings disclosed in the present specification are only the most preferred embodiment of the present invention and do not represent all of the technical spirit of the present invention, and thus it is to be understood that various equivalents and modified examples, which may replace the configurations, are possible when filing

the present application.

- (13) Hereinafter, any component being disposed "at an upper portion (or lower portion)" of a component or "above (or below)" a component may mean that any component is disposed in contact with an upper surface (or a lower surface) of the component and another component is interposed between the component and any component disposed above (or below) the component. (14) Hereinafter, a tray for conveying a cup and a container according to some embodiments of the present invention will be described. The tray for conveying a cup and a container illustrated in the drawings follows an embodiment, and constituent elements thereof are illustrated to the embodiment illustrated in the drawings and if necessary, some constituent elements may be added, modified, or deleted.
- (15) FIGS. 1a, 1b, and 1c are perspective views illustrating a configuration of a tray for conveying a cup and a container according to an embodiment of the present invention. In addition, FIGS. 2a and 2b are perspective views illustrating a state in which a cup holder and a container is accommodated in the tray for conveying a cup and a container according to the embodiment illustrated in FIGS. 1a, 1b, and 1c. That is, FIG. 2a(a) is a perspective view illustrating a state in which multiple cups are accommodated in the tray for conveying a cup and a container in FIG. 1a, and FIG. 2a(b) is a perspective view illustrating a state in which both the cup and food are accommodated in the tray for conveying a cup and a container in FIG. 1a. In addition, FIG. 2b(a) is a perspective view illustrating a state in which multiple containers are accommodated in the tray for conveying a cup and a container in FIG. 1b, and FIG. 2b(b) is a perspective view illustrating a state in which both the cup and the container are accommodated in the tray for conveying a cup and a container in FIG. 1a.
- (16) As illustrated in FIGS. **1***a*, **1***b*, and **1***c*, a tray **100** for conveying a cup and a container according to the present invention may include a body part **110** having a space in which at least one of the cup and the container is accommodated, and at least one fastening portion **120** provided on a bottom portion of the body part **110** and into which a protrusion **210** of an external member **200** is inserted and coupled.
- (17) In this case, as illustrated in FIGS. **2***a* and **2***b*, the external member **200** may be the cup, a cup holder, a dish, or the container. The cup holder **200***a* may have a hollow reverse truncated conical shape so as to cover the cup. In addition, the container (dish) **200***b* or **200***d* may have different sizes of accommodation spaces so as to contain foods **300** including desserts including a cake, a donut, confectionery, baking, etc., which may be sold together with beverage in a coffee shop or classify the foods **300** from surrounding foods.
- (18) In this case, as illustrated in FIG. 1b(a)(b), the container 200b may constitute a bottom surface on which the foods 300 may be laid and a peripheral wall which extends to an upper portion of a peripheral portion of the bottom surface at a predetermined height. However, the present invention is not limited thereto, and as illustrated in FIG. 1c, in the container 200c, upper and lower portions are opened by a scheme of surrounding a periphery of the foods 300 which are directly laid on the bottom surface of the body part 110 and only an oval peripheral wall may be configured so that the periphery is blocked by a surface extending at a predetermined height to separate the foods 300. (19) However, the cup or the cup holder, or the dish or the container corresponding to the external member 200 may further include at least protrusion 210 which extends and protrudes downward from a body and is inserted into the fastening portion 120. In this case, in respect to the fastening portion 120, the fastening portion 210 is inserted according to the size of the container 200b or 200c may be distant.
- (20) Meanwhile, a location of the protrusion 210 is not limited thereto, and as illustrated in FIG. 1b(b), the external member 200 may further include at least one protrusion 210' which extends and protrudes to a side surface from the body of the container 200b and is inserted into a fastening portion 120' separately provided on one wall surface of the body part 110.
- (21) The body part 110 as a surface of which an upper portion is opened and which extends at a

predetermined height may be configured in a rectangular box shape in which the periphery is blocked. However, the configuration is not limited thereto. That is, if the upper portion of the body part **110** is opened and the body part **110** includes a bottom portion for supporting the accommodated cup and container, the body part **110** may be configured in various figures including a circular shape, an oval shape, and a polygonal shape, and further, at least one of sides of the figure may be configured to be opened or blocked.

- (22) However, for easy description of the tray **100** for conveying the cup and the container according to the present invention, as the configuration of the tray **100** for conveying the cup and the container is illustrated in the drawings in the present disclosure, only a rectangular box type in which plate portions are configured in all peripheries will be described.
- (23) The body part **110** may include a handle **130** integrally configured in the body part **110** itself, and first and second coupling portions **140***a* and **140***b* fastened to one side and the other side of the body part **110**, respectively opposite to the other side and one side of another body part **110**′. (24) In this case, as illustrated in the drawing, the handle **130** may be configured by a hole type handle having holes into which a part of a hand may be inserted on both opposite side surfaces of the body part **110**. However, the configuration of the handle **130** is not limited thereto, and the handle **130** may be configured by a ring type handle which is located on the bottom surface of the body part **110** or both opposite side surfaces of the body part **110**, and in which a part of a paperboard of the body part **110** protrudes upward and is formed in a connection ring shape. (25) In addition, the first and second coupling portions **140***a* and **140***b* are formed by protruding pieces which protrude to one side of the body part **110** and fastened to protruding pieces which protrude to be opposite so as to be fastened to the other side of another body part 110' to be opposite to connect at least two body parts **110** and **110**′ to each other in a side surface direction. In this case, in the case of the fastened protruding pieces, a protruding piece of the first coupling portion **140***a* may be fastened to a protruding piece of the second coupling portion **140***b*, and the protruding piece of the second coupling portion **140***b* may be fastened to the protruding piece of the first coupling portion **140***a*.
- (26) Meanwhile, in the drawing, the first and second coupling portions **140***a* and **140***b* are configured only on both side surfaces, but not limited thereto, and it should be noted that the first and second coupling portions **140***a* and **140***b* may be configured on both side surfaces, i.e., four side surfaces.
- (27) Further, as illustrated in FIG. 2a(a), multiple cups or cup holders may be accommodated in the fastening portion **120** configured in the tray **100** for conveying the cup and the container according to the present invention, but the present invention is not limited thereto.
- (28) That is, as illustrated in FIG. 2a(b), the cup and the foods 300 may be together accommodated in the tray 100 for conveying the cup and the container according to the present invention. Alternatively, the tray 100 may accommodate multiple containers 200b and 200d having one or more different sizes, which have an accommodation space which may contain the foods 300 including the desserts including the cake, the donut, the confectionery, the baking, etc., which may be sold together with the beverage in the coffee shop or classify the foods 300 from the periphery as illustrated in FIG. 2b(a) or accommodate both the cup holder 200 and the containers 200b and 200d as illustrated in FIG. 2b(b).
- (29) When both the beverage and the dessert are purchased at present, there is inconvenience that each of a cup carrier (tray) and a dessert carrier (tray) should be provided. The tray **100** for conveying the cup and the container according to the present invention may provide the dessert **300** such as the beverage and the donut in one space at the time of taking out the dessert **300**. In this case, as the fastening portion **120** is configured by a cutting line which is formed to be cuttable through a perforated line, even though the food is contained in the tray **100** for conveying the cup and the container, the food is not extracted through the fastening portion **120**.
- (30) Further, the inside and the container of the tray 100 for conveying the cup and the container

- may be made by a food paper that does not a problem even though the food contacts the food paper or an inner surface may be coated with the food paper, in order to directly contain the food.
- (31) Through this configuration, the tray **100** for conveying the cup and the container according to the present invention may include all of three functions as the cup carrier (tray), the dessert carrier (tray), or the cup carrier (tray)+the dessert carrier (tray).
- (32) FIGS. 3(a) and 3(b) illustrate a first embodiment for describing that the tray for conveying a cup and a container is fastened by using first and second coupling units. In this case, FIG. 3(a) is a diagram illustrating a state before the first body part 110 and the second body part 110 and the second body part 110 and the second body part 110 are fastened.
- (33) As illustrated in FIGS. **3**(*a*) and **3**(*b*), the first and second coupling portions **140***a* and **140***b* as protruding pieces which extend to the body part **110** and protrude are configured by cutting a slit type insertion hole from one surface at the protruding piece. In this case, the first and second coupling portions **140***a* and **140***b* may be formed by replacing insertion holes formed on one side and the other side of the body part **110** with each other.
- (34) As an example, when the insertion hole of the first coupling portion **140***a* positioned on one side of the first body part **110** is formed to be cut from one surface (front surface), the insertion hole of the second coupling portion **140***b* positioned on the other side of the second coupling portion **110**′ is formed to be cut from the other surface (rear surface).
- (35) Therefore, cut portions of the first coupling portion **140***a* and the second coupling portion **140***b* are opposite to each other and the insertion holes are fitted and coupled to cross each other, and as a result, the first body part **110** and the second body part **110**′ are fastened, not separated and fixed.
- (36) In this case, the first body part **110** and the second body part **110**' support a load of loaded contents (external member **200**) from the top to the bottom. In addition, in the first and second coupling portions **140***a* and **140***b* positioned on the side surfaces of the first body part **110** and the second body part **110**', when the formed insertion holes are cut front and back (or left and right), and the cut portions are opposite to each other and the insertion holes are fitted and coupled to cross each other, and as a result, the first body part **110** and the second body part **110**' are fastened to each other, the cut, the cup holder, the container, etc., may be supported in a rigid structure with the loaded generated from the top the bottom.
- (37) FIGS. 4(a) and 4(b) illustrate a second embodiment for describing that the tray for conveying a cup and a container in FIG. 1 is fastened by using the first and second coupling units.
- (38) As illustrated in FIGS. **4**(a) and **4**(b), in the first and second coupling portions **150**a and **150**b, at least one protruded protruding piece **150**b is formed on one side of the body part **110** and at least one fitting groove **150**a into which the protruding piece **150**b is fitted is formed on the other side of the body part **110**.
- (39) Accordingly, the protruding piece which is the first coupling portion **150***a* of the first body part **110** is coupled to the fitting groove **150***a* which is the second coupling portion **150***b* of the second body part **110**′, and as a result, first and second body parts **110** and **110**′ may be rigidly coupled to each other.
- (40) As illustrated in FIGS. **3**, and 4(a) and 4(b), a plurality of body parts **110** are connected by using the first and second coupling portions to be used as one tray for conveying the cup and the container.
- (41) Accordingly, in the figures, one body part **110** is configured to accommodate three cups, but this is just one embodiment, and is not limited thereto. That is, the body part **110** may accommodate all cups of a number required for accommodation by a scheme of fastening the plurality of body parts **110** regardless of the number of accommodated cups.
- (42) Meanwhile, the fastening portion **120** may be a cutting line which has only a predetermined length without a width and is formed to be cuttable through the perforated line. As the fastening

- portion **120** is configured by the cutting line, even though the food **300** is contained in the tray **100** for conveying the cup and the container, the food **300** may be prevented from being extracted to the fastening portion **120**.
- (43) However, the present disclosure is not limited thereto, and the fastening portion **120** may be a slit having a predetermined length and a predetermined width.
- (44) In this case, the slit and the cutting line may be formed by pressing a perforating press or mold or a cutter mold. The slit and the cutting line may have at least one shape of an arc shape and a clamp shape (or V shape).
- (45) As a result, the slit and the cutting line may be fixed by inserting a protrusion **210** of the external member such as the cup holder **200**. In this case, in the slit, the protrusion **210** may be naturally inserted into the hole having the predetermined width. Further, when the protrusion **210** is inserted into the cutting line, the protrusion **210** may be inserted while the cutting line is slightly widened.
- (46) For reference when the insertion of the protrusion **210** is completed, while the cutting line is closed by elasticity of the body part **110** itself, the protrusion **210** between the cutting lines is compressed, the cutting line may be rigidly fixed to a bottom of the body part **110**. In particular, as the cutting line has the arc shape and the clamp shape (or V shape), elastic force may be provided to the protrusion inserted between the cutting lines to more rigidly fix the cutting line.
- (47) Meanwhile, as illustrated in FIGS. **1***a* and **2***a*, when the cutting line has the arc shape, first and second cutting branch lines may be provided on one end of the cutting line in a branched form so that the cutting line may be further elastically widened and the same components as the first and second cutting branch lines may be provided even on the other end of the cutting line based no the center of the cutting line.
- (48) Further, as illustrated in FIGS. **1***b*, **1***c*, and **2***b*, when the cutting line ha the clamp shape (or V shape), the protrusion **210** inserted into the cutting line is inserted while being transformed to the clamp shape. In this case, the protrusion **210** may be fixed by the elastic force of the cutting line **120** itself and an operation feel widened outwards by an elastic restoration force of the protrusion **210** itself due to the transformation of the protrusion **210** may be generated, and as a result, the protrusion **210** may be more rigidly fixed to the fastening portion **120** than the case where the cutting line has the arc shape. This may more effectively prevent the cup holder **200** and the containers **200***b* and **200***d* from being separated due to external impact when conveying multiple cups and containers. Meanwhile, the cutting branch line may have only a length without the width similarly to the cutting line, and may be cut and formed together when the cutting line is cut and formed by pressing by the cutter mold.
- (49) Meanwhile, as the slit has a hole having a predetermined width, the slit may not be rigidly fixed when the insertion of the protrusion **210** is completed. In order to prevent this, as the slit has the arc shape and the clamp shape (or V shape) like the cutting line, the elastic force and a restoration force may be provided to the protrusion **210** inserted between the slits, and as a result, the slit may be rigidly fixed.
- (50) However, the slit may have lower fixation power to the body part **110** and the protrusion **210** than the cutting line. In order to solve this, the slit may further include an adhesive member for attaching the protrusion **210** penetrated through the slit on the bottom surface at one side of the bottom surface of the body part **110**. In this case, the adhesive member may be provided while being attached to the bottom surface of the body part **110**.
- (51) As an example, when the protrusion **210** is inserted into the slit and exposed to the bottom surface of the body part **110**, the adhesive member is attached to one surface of the exposed protrusion **210**. Through this, the protrusion inserted into the slit may be more rigidly fixed. (52) FIG. **5** is a perspective view illustrating a state in which the tray for conveying a cup and a container is folded in order to storage the tray for conveying a cup and a container according to the embodiment of the present invention.

- (53) As illustrated in FIG. **5**, in the tray **100** for conveying the cup and the container according to the present invention, a surface which extends to the bottom portion may be folded inside. As an example, the tray **100** for conveying the cup and the container is kept in a folding state, and the folded surface is erected in use in order to accommodate the cup and the food, and the protrusion **210** provided in the cup holder **200***a* and the containers **200***b* and **200***c* are fitted into the fastening portion **120** to be completed.
- (54) Meanwhile, in FIG. **5**, the tray **100** for conveying the cup and the container is configured in a completed box form, however, the tray **100** for conveying the cup and the container is configured to be used through only a folding and unfolding process. However, this is just one embodiment, and the present invention is not limited thereto. That is, the tray **100** for conveying the cup and the container may be configured by one sheet of rectangular paper without using an adhesive, and the tray **100** for conveying the cup and the container may be implemented by folding and fitting. (55) However, the tray **100** for conveying the cup and the container according to the present invention can be immediately used without the manufacturing process and does not occupy a large volume in the simple structure of the plate shape configured only by an outer periphery and is simple in terms of the manufacturing process to save cost. Further, the tray for conveying the cup and the container can save a material and more stably support the cup in a simple and robust structure.
- (56) FIG. **6** is a perspective view illustrating a configuration of a tray for conveying a cup and a container according to another embodiment of the present invention.
- (57) As illustrated in FIG. **6**, the tray for conveying a cup and a container according to the present invention may include a body part **110** in which a space accommodating at least one of the cup and the container, at least one fastening portion **120** provided on a bottom surface of the body part **110** and in which the protrusion **210** of the external member **200** is inserted and coupled, and a fixation bar **200** having at least one pole so as to be penetrated, inserted, and bound into the fastening portion **120** on a bottom of the body part **110** and protrude upward on the bottom surface of the body part **110**.
- (58) In this case, the tray for conveying the cup and the container according to another embodiment illustrated in FIG. **6** may be configured equally to the configuration of the tray for conveying the cup and the container described with reference to FIGS. **1** to **5** above. However, the tray may further include the fixation bar **200***d*.
- (59) The fixation bar **200***d* as a component for accommodating both the cup and the food **300** in the body part **110** may support the food **300** including desserts such as cakes, donuts, confectionery, braking, etc., on one side or both sides by using at least one pole so as to protrude upwards from the bottom surface of the body part **110**.
- (60) Likewise, the fixation bar **200***d* may include or be coated with paper, plastic, metal, and all or some thereof, which have a support force in order to support the food **300** on one side or both sides.
- (61) FIGS. 7(a) and 7(b) are configuration diagrams specifically illustrating a configuration of a fixation bar in FIG. **6**. In this case, FIG. 7(a) is a configuration diagram illustrating an unfolding state of the fixation bar and FIG. 7(b) is a configuration diagram illustrating a folding state of the fixation bar.
- (62) As illustrated in FIG. **7**(*a*), the fixation bar **200***d* may be provided as a plate part having a predetermined width, and may have a folding line **201** having a predetermined distance while both centers correspond to each other. Meanwhile, the fixation bar **200***d* may further include the folding line **201** slantly inwards of the center by extending the folding line **201**.
- (63) In addition, as illustrated in FIG. 7(b), as the fixation bar 200d is bent inward along the folding line 201, a central surface may be configured by a plate part having a predetermined width, and both side surfaces may be configured by clamp-shaped (or V-shaped) poles.
- (64) In addition, the clamp-shaped (or V shaped) pole of the fixation bar **200***d* is penetrated, inserted, and fastened into the cutting line of the fastening portion **120** and protrudes upwards from

the bottom surface of the body part **110**, and the central surface of the fixation bar **200***d* may be in close contact with a lower end of the body part **110**.

- (65) In this case, as the cutting line of the fastening portion **120** is configured in the clamp shape (or V shape), elastic force and a surface friction force of the cutting line itself are generated, and the fixation bar **200***d* penetrated, inserted, and fastened into the cutting line of the fastening portion **120** may be rigidly fixed to the fastening portion **120**. In this case, the fixation bar **200***d* is penetrated and inserted toward an upper end from the lower end of the body part **110** to prevent the fixation **200***d* from being separated downward from the body part **110** when conveying the tray for conveying the cup and the container.
- (66) Meanwhile, only the case where the cutting line of the fastening portion **120** has the clamp shape (or V shape) is described, but when the shape of the cutting line of the fastening portion **120** is changed, the shape of the fixation bar **200***a* should also be changed in response thereto.
- (67) FIG. **8** is a configuration diagram illustrating a configuration in which a fixation bar and a cup holder are coupled to a body part in FIG. **6**.
- (68) As illustrated in FIG. **8**, in the case of the tray for conveying the cup and the container according to the present invention, the protrusion **210** of the external member **200** such as the cup holder may be coupled in an upper portion of the body part **110** and the pole of the fixation bar **220***d* bent inwards along the folding line **201** may be inserted and coupled in a lower portion of the body part **110**.
- (69) FIG. **9** is a perspective view illustrating a state in which a cup and a food are accommodated in a tray for conveying a cup and a container according to another embodiment of the present invention in FIG. **6**.
- (70) As illustrated in FIG. **9**, in the case of the tray for conveying the cup and the container according to the present invention, a beverage cup **400** is received in the cup holder **200***a* coupled to the upper portion of the fastening portion **120**.
- (71) In addition, the fixation bar **200***d* coupled to the lower portion of the fastening portion **120** supports the food **300** including the desserts such as the cakes, the donuts, the confectionery, the baking, etc., on one side or both sides by using at least one pole so as to protrude upwards to prevent the food **300** from being discharged.
- (72) For understanding of the disclosed embodiments, reference numerals are described in the preferred embodiments shown in the drawing, and specific terms are used to describe the disclosed embodiments, but the embodiments disclosed by the specific terms are not limited, and the disclosed embodiments may include all components that those skilled in the art may generally consider.
- (73) Unless otherwise specified, like "essential", "important", etc., described in the disclosed embodiment, the corresponding components may not be components particularly required for application of the disclosed embodiment. Further, it will also be appreciated by those skilled in the art that various embodiments can be made within the scope of the technical spirit of the present invention. Accordingly, the true technical scope of the present invention should be defined by the technical spirit of the appended claims.

EXPLANATION OF REFERENCE NUMERALS AND SYMBOLS

(74) **100**: Try for conveying cup and container **110**: Body part **120**: Fastening portion **130**: Handle **140***a*, **140***b*, **150***a*, **150***b*: Coupling portion **200**, **200***a*, **200***b*, **200***c*: External member (cup holder and container) **200***d*: Fixation bar **210**: Protrusion **300**: Food **400**: Beverage cup

Claims

1. A tray for conveying a cup and a container, the tray comprising: a body part having an opened-box shape and a space therein to accommodate at least one of a cup or a food; at least one fastening portion positioned on one side of the body part; and external members positioned in the body part,

each of the external members having a protrusion inserted and coupled into at least one fastening portion, wherein the external members comprise: a cup holder having a hollow reverse truncated conical shape; and a container having a bottom surface and a peripheral wall extending upward from the bottom surface at a predetermined height, wherein each external member is independently positioned in the body part such that no external member contacts another external member, thereby maintaining a predetermined separation distance between adjacent external members, wherein the fastening portion has a slit or a cutting line having a clamp shape.