Patent Documents[0006]
Patent Document 1: Japanese Laid-Open Patent Application No. 2013-203464

SUMMARY [0007]

When the pouring spout of the refill container and the pouring unit constituting the packaging container described in Patent Document 1 are coupled, the two are coupled by fitting the tubular pouring spout of the refill container onto the inner side of the peripheral wall of the pouring unit, as described above. A thread part is formed on an outer circumferential surface of the pouring spout, resulting in the possibility that the tubular pouring spout is not smoothly fitted into the pouring unit constituting the packaging container.

[0008]

The present disclosure made to solve the above-described problems, and an object of the present disclosure is to provide a coupled structure between a pouring spout of a refill container and a pouring unit of a packaging container that, first, makes it possible to smoothly couple the pouring spout of the refill container and the pouring unit constituting the packaging container and, second, makes it possible to keep the pouring spout that is fitted into the pouring unit from separating from the pouring unit while transferring contents from the refill container into the packaging container.

[0009]

(1) In a first aspect, the present disclosure provides a pouring spout of a container used for a refill container storing contents for refilling a packaging container provided with a pouring unit including a nozzle, comprising: a spout main body including a tubular pouring part with a channel for allowing the contents to pass therethrough formed on an inner side, and an attached part attachable to the container on one end side in an extending direction of the tubular pouring part; and a closing member configured to close the channel on the one end side is configured as a separate body from the spout main body and connected to the spout main body by a coupling member, wherein the coupling member is fitted into the channel and connects a lower end surface of the attached part to a lower surface of the closing member; and wherein the closing member is fitted onto an inner circumferential surface of the tubular pouring part on the one end side thereof in such a manner that the closing member is removed in a horizontal manner along the inner circumferential surface of the tubular pouring part by an external force applied from the other end side opposite to the one end side in the extending direction of the tubular pouring part from the inner circumferential surface of the tubular pouring part; wherein the tubular pouring part comprises a guide that protrudes from an inner wall of the channel toward a center, extends in a direction corresponding to an extending direction of the tubular pouring part, and guides the tubular pouring part in an extending direction of the nozzle; and wherein a width of the guide is formed to a dimension corresponding to a width of a slit formed in the nozzle.

[0010]

According to this disclosure, the tubular pouring part comprises a guide that protrudes from the inner wall of the channel toward a center, extends in a direction corresponding to the extending direction of the tubular pouring part, and guides the tubular pouring part in the extending direction of the nozzle, making it possible to smoothly couple the pouring spout of the refill container with the pouring unit of the packaging container when refilling the packaging container with contents from the refill container.

[0011]

In the pouring spout of a container according to the present disclosure, a width of the guide corresponds to a width of a slit formed in the nozzle.

[0012]

According to this disclosure, the width of the guide corresponds to the width of the slit formed in the nozzle, making it possible to keep the pouring spout of the refill container coupled to the pouring unit of the packaging container from separating from the pouring unit when refilling the packaging container with contents from the refill container.

[0013]

The pouring spout of a container according to the present disclosure further comprises a closing member for closing the channel on the one end side. The closing member is configured as a separate body from the spout main body, and is fitted onto an inner circumferential surface of the tubular pouring part on the one end side thereof in such a manner that the closing member is removed by an external force applied from the other end side opposite to the one end side in the extending direction of the tubular pouring part from the inner circumferential surface of the tubular pouring part.

[0014]

According to this disclosure, the closing member that closes the one end side of the tubular pouring part is a separate body from the spout main body, and is fitted onto the inner circumferential surface of the tubular pouring part in such a manner that the closing member is removed by an external force from the inner circumferential surface of the tubular pouring part as described above, and thus the closing member is removed without damage thereto when the closing member is pressed upward by the nozzle constituting the pouring unit of the packaging container to be refilled with contents. Thus, when the closing member is removed from the inner side of the tubular pouring part, broken pieces are not produced. As a result, when the contents are transferred from the container into the packaging container, it is possible refill the packaging container with just the contents. Further, broken pieces are not produced, and thus the pouring unit of the packaging container is never blocked by the broken pieces.

[0015]

In the pouring spout of a container according to the present disclosure, the closing member is connected by a coupling member to the spout main body.

[0016]

According to the present disclosure, the closing member is connected by the coupling member to the spout main body, making it possible to keep the closing member coupled without separation from the spout main body when the closing member is removed from the inner side of the tubular pouring part. Thus, when the contents are transferred from the container into the packaging container, the closing member never moves to the packaging container.

[0017]

(2) In a second aspect, the present disclosure provides a coupled structure comprising a pouring unit- configured to couple to a pouring spout, the pouring unit comprising a nozzle for pouring contents from a packaging container, and a peripheral wall surface surrounding an outer periphery of the nozzle, the nozzle and the peripheral wall surface being connected at a base of the nozzle, and a pouring spout that is used for a refill container storing contents for refilling the packaging container, and comprises a spout main body including a tubular pouring part with a channel for allowing the contents to pass therethrough formed on an inner side, and an attached part attachable to the container on one end side in an extending direction of the tubular pouring part; and a closing member configured to close the channel on the one end side is configured as a separate body from the spout main body, and connected to the spout main body by a coupling member, wherein the coupling member is fitted into the channel and connects a lower end surface of the attached part to a lower surface of the closing member; and wherein

the closing member is fitted onto an inner circumferential surface of the tubular pouring part on the one end side thereof in such a manner that the closing member is removed in a horizontal manner along the inner circumferential surface of the tubular pouring part by an external force applied from the other end side opposite to the one end side in the extending direction of the tubular pouring part from the inner circumferential surface of the tubular pouring part; the pouring unit comprises a first slit formed by a missing part of a peripheral wall constituting the nozzle in a circumferential direction thereof, in an extending direction of the nozzle; and the tubular pouring part comprises a guide that protrudes from an inner wall of the channel toward a center, extends in a direction corresponding to an extending direction of the tubular pouring part, is fitted onto an inner side of the first slit of the nozzle, and guides the nozzle in the extending direction of the tubular pouring part in the extending direction of the nozzle; and wherein a width of the guide is formed to a dimension corresponding to a width of the first slit formed in the nozzle.

[0018]

According to this disclosure, the tubular pouring part comprises a guide that protrudes from the inner wall of the channel toward the center, extends in a direction corresponding to the extending direction

of the tubular pouring part, and guides the tubular pouring part in the extending direction of the nozzle, making it possible to smoothly couple the pouring spout of the refill container with the pouring unit of the packaging container when refilling the packaging container with contents from the refill container.

[0019]

In the coupled structure between the pouring unit and the pouring spout according to the present disclosure, in the pouring unit, a second slit extending from the nozzle to an outer side in a radial direction is formed at the base of the nozzle, and the guide is fitted onto the inner side of the first slit of the nozzle, causing the second slit to function as an air vent hole for the pouring unit and the pouring spout that are coupled.

[0020]

According to this disclosure, the second slit functions as an air vent hole, making it possible to smoothly transfer contents from the refill container into the packaging container when refilling the packaging container with contents from the refill container.

[0021]

According to the present disclosure, it is possible to smoothly couple a pouring spout of a refill container and a pouring unit constituting a packaging container, and keep the pouring spout that is fitted into the pouring unit from separating from the pouring unit while transferring contents from the refill container into the packaging container.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022]

Fig. 1 is a plan view of a standing pouch serving as a refill container provided with a pouring spout according to the present invention.

Fig. 2A is a cross-sectional view of the pouring spout of an embodiment according to the present invention. Fig. 2B is a front view of the pouring spout.

Fig. 3A is a plan view of the pouring spout of the embodiment according to the present invention, as viewed from a tip end side of the tubular pouring part. Fig. 3B is a bottom view, as viewed from an attached part side.

Fig. 4 is a plan view of a packaging container to be refilled with contents from the standing pouch serving as the refill container.

Fig. 5A is a perspective view of a main body part of the pouring unit constituting the packaging container illustrated in Fig. 4. Fig. 5B is a plan view of the main body part of the pouring unit, as viewed from a tip end side of a nozzle.

Fig. 6A and Fig. 6B are explanatory views for explaining an action of the pouring spout according to the present invention.

Embodiments of the Invention

[0023]

An embodiment of the present invention is described below with reference to the drawings. Note that the present invention includes inventions of the same technical idea as the modes set forth in the embodiments and drawings below, and the technical scope of the present invention is not limited to those described in the embodiments and drawings.

What is claimed is:

1. A pouring spout used for a refill container storing contents for refilling a packaging container provided with a pouring unit including a nozzle, comprising:

a spout main body including a tubular pouring part with a channel for allowing the contents to pass therethrough formed on an inner side, and an attached part attachable to the container on one end side in an extending direction of the tubular pouring part; and

a closing member configured to close the channel on the one end side is configured as a separate body from the spout main body and connected to the spout main body by a coupling member, wherein the coupling member is fitted into the channel and connects a lower end surface of the attached part to a lower surface of the closing member; and wherein the closing member is fitted onto an inner circumferential surface of the tubular pouring part on the one end side thereof in such a manner that the closing member is removed in a horizontal manner along the inner circumferential surface of the tubular pouring part by an external force applied from the other end side opposite to the one end side in the extending direction of the tubular pouring part from the inner circumferential surface of the tubular pouring part; wherein:

the tubular pouring part comprises a guide that protrudes from an inner wall of the channel toward a center, extends in a direction corresponding to the extending direction of the tubular pouring part, and guides the tubular pouring part in an extending direction of the nozzle; and wherein a width of the guide is formed to a dimension corresponding to a width of a slit formed in the nozzle.

2. A coupled structure comprising a pouring unit configured to couple to a pouring spout, the pouring unit comprising a nozzle for pouring contents from a packaging container, and a peripheral wall surface surrounding an outer periphery of the nozzle, the nozzle and the peripheral wall surface being connected at a base of the nozzle, and the pouring spout being used for a refill container storing contents for refilling the packaging container, and comprising a spout main body including a tubular pouring part with a channel for allowing the contents to pass therethrough formed on an inner side, and an attached part attachable to the container on one end side in an extending direction of the tubular pouring part; and

a closing member configured to close the channel on the one end side is configured as a separate body from the spout main body, and connected to the spout main body by a coupling member, wherein the coupling member is fitted into the channel and connects a lower end surface of the attached part to a lower surface of the closing member; and wherein

the closing member is fitted onto an inner circumferential surface of the tubular pouring part on the one end side thereof in such a manner that the closing member is removed in a horizontal manner along the inner circumferential surface of the tubular pouring part by an external force applied from the other end side opposite to the one end side in the extending direction of the tubular pouring part from the inner circumferential surface of the tubular pouring part; wherein:

the pouring unit comprises a first slit formed by a missing part of a peripheral wall constituting the nozzle in a circumferential direction thereof, in an extending direction of the nozzle; and

the tubular pouring part comprises a guide that protrudes from an inner wall of the channel toward a center, extends in a direction corresponding to the extending direction of the tubular pouring part, is fitted onto an inner side of the first slit of the nozzle, and guides the tubular pouring part in the extending direction of the nozzle; and wherein a width of the guide is formed to a dimension corresponding to a width of the first slit formed in the nozzle.

3. The coupled structure between a pouring unit and a pouring spout according to claim 2, wherein:

the pouring unit comprises a second slit extending from the nozzle to an outer side in the radial direction at the base of the nozzle; and

the guide is fitted onto an inner side of the first slit of the nozzle, and the second slit functions as

an air vent hole for the pouring unit and the pouring spout that are coupled.