SPECIFICATION

POURING SPOUT

Field of the Invention

[0001]

The present invention relates to a pouring spout, and more specifically to a pouring spout constituting a refill container storing contents to pour the contents into a predetermined packaging container.

BACKGROUND ART

[0002]

Packaging containers include containers utilized repeatedly by pouring contents from a refill container separately provided into the packaging container. The refill container includes a pouch main body part and a pouring spout attached to this pouch main body part. The pouring spout is a constituting part that pours the contents from the pouch main body part into the packaging container. The present applicant has proposed various pouring spouts described above that constitute a refill container.

[0003]

The pouring spout proposed in Patent Document 1 is a pouring spout proposed by the present applicant. This pouring spout includes a closing member that allows a channel for pouring out the contents from the pouring spout to be opened and closed. Specifically, in this pouring spout, a main body of the pouring spout and a constituent for closing the channel are integrally formed. The constituent for closing is provided on one end side forming an outer side of the channel, and the channel is opened and closed on the one end side. The closing member, in a mode of removal from the channel by an external force applied from a pouch main body side, is fit horizontally onto an inner peripheral surface of the channel on the one end side thereof. The closing member is connected to the pouring spout by a coupling member having a string or belt shape.

PRIOR ART DOCUMENTS

Patent Documents

[0004]

Patent Document 1: Patent No. 6236139

SUMMARY

[0005]

The present applicant has been diligently researching pouring spouts even after proposing the pouring spout described in Patent Document 1 mentioned above. The result was an invention of a pouring spout constituted by a spout main body bonded to a pouch main body part constituting a refill container, and a closing unit that is constituted as a separate body from the spout main body and opens and closes a channel formed in the spout main body. The closing unit is constituted by a closing member that opens and closes the channel, an attaching part that detachably attaches the closing unit to the spout main body, and a coupling member that connects the closing member and attaching part. In such a pouring spout, it is necessary for

the closing member to be maintained in an open state without closing the channel while the contents are being transferred from the refill container to the packaging container.

[0006]

The present disclosure was made to resolve the above-described problems, and an object of the present disclosureis to provide a pouring spout in which a closing member is maintained in an open state while contents are being transferred.

[0007]

A pouring spout according to the present disclosure for solving the above-described problems is a pouring spout provided to a refill container, and for pouring out contents stored in the refill container into a packaging container. The pouring spout comprises a spout main body and a closing unit, the spout main body including at least a bonded part bonded to a pouch main body part constituting the refill container, a tubular part for pouring out the contents, and a channel for passing the contents from an inside to an outside of the refill container, and the closing unit including a closing member that freely opens and closes the channel, an attaching part that detachably attaches the closing unit to the spout main body, and a coupling member that connects the closing member and the attaching part. The spout main body is formed with an attached part to which the attaching part is detachably attached. The packaging container includes a container main body and a pouring unit for pouring out the contents stored in the container main body. The pouring unit includes at least a nozzle for pouring out the contents. The coupling member couples a first surface of the closing member on the attaching part side and facing the pouch main body side in a mode of the closing member having closed the channel, and the attaching member. The closing member includes a fixed region corresponding to an area of a second surface opposite to the first surface on the attaching part side thereof in which the coupling member is coupled to the closing member, the fixed region being supported by the nozzle, thereby holding an angle formed by the closing member with an end surface of the bonded part on the pouch main body part side at less than 90 degrees.

[0008]

According to this disclosure, in the pouring spout having the configuration mentioned above, the closing member includes the fixed region corresponding to an area of the second surface of the closing member on the attaching part side opposite to the first surface and corresponding to the area where the coupling member is coupled to the closing member, the fixed region being supported by the nozzle, thereby holding the closing member in a mode in which an angle formed by the closing member with the end surface of the bonded part on the pouch main body part side is less than 90 degree. The closing member is held by the nozzle, and thus maintained in an open state while the contents are being transferred.

[0009]

In the pouring spout according to the present disclosure, in a mode of the closing member being pressed upward by the nozzle and having opened the channel, the coupling member is formed at a length within a range allowing the second surface to be brought into contact with an outer peripheral surface of the nozzle.

[0010]

According to this disclosure, the coupling member is formed at a length within a

range in which the second surface can be brought into contact with the outer peripheral surface of the nozzle and thus, in the mode of the closing member having opened the channel, the fixed region of the closing member corresponding to the area where the coupling member is coupled does not move further inward of the pouch main body part than a tip end of the nozzle. Therefore, the closing member reliably comes into contact with the nozzle, and the open mode of the closing member is held by the nozzle.

[0011]

In the pouring spout according to the present disclosure, the coupling member is constituted by a first constituting part extending from the coupling member connecting part toward the closing member, and a second constituting part bent with respect to the first constituting part and extending from a tip end of the first constituting part toward the first surface, and has an urging force that urges the closing member toward the nozzle side.

[0012]

According to this disclosure, as mentioned above, the coupling member is constituted by the first constituting part and the second constituting part, and the coupling part has an urging force that urges the closing member toward the nozzle side, and thus the closing member in the open mode is in a state of being interposed between the coupling member and the nozzle, and the open mode of the closing member is maintained.

[0013]

In the pouring spout according to the present disclosure, the attached part is formed with a coupling member connecting part jutting toward the closing member side, and the coupling member is connected to the coupling member connecting part at one end and connected to the first surface of the closing member at the other end in a longitudinal direction.

[0014]

According to this disclosure, the attached part is formed with the coupling member connecting part jutting toward the closing member side, and the coupling member is connected to the coupling member connecting part at one end and connected to the first surface of the closing member at the other end in the longitudinal direction, making it possible for the coupling member connecting part to impart an urging force onto the coupling member. As a result, the coupling member and the nozzle sandwich the closing member, and the closing member can be maintained in the open mode.

[0015]

According to the present disclosure, it is possible to provide a pouring spout having a function of maintaining an open state of the closing member while contents are being transferred and promptly closing a channel after the transfer is completed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016]

Fig. 1 is a plan view illustrating an example of a refill container that uses a pouring spout according to the present invention.

Fig. 2 is a side view illustrating the pouring spout according to the present invention with a spout main body and a closing unit separated from each other.

Fig. 3 is a side view illustrating the pouring spout according to the present invention with the