



[Reason]

1 Details of the written amendment submitted on June 10, 2020 (hereinafter referred to as "the Amendment")

The Amendment is an amendment of the scope of claims. Recitations of Claim 1 of the scope of claims before and after the Amendment are as follows.

(1) Before the Amendment

"[Claim 1]

A method for producing a composite preform comprising:  
a step of preparing a preform made of plastic material;  
a step of preparing a tubular plastic member;  
a step of cooling the preform and/or heating the plastic member; and  
a step of fitting the preform into the plastic member so that an outer surface of the preform may be in internal contact with an inner surface of the plastic member."

(2) After the Amendment (the underlines are applied by the body; the same applies hereinafter.)

"[Claim 1]

A method for producing a composite preform comprising:  
a step of preparing a preform made of plastic material;  
a step of preparing a tubular plastic member;  
a step of cooling the preform and/or heating the plastic member; and  
a step of fitting the preform into the plastic member so that an outer surface of the preform may be in internal contact with an inner surface of the plastic member, wherein the tubular plastic member is obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form,  
holding the tubular parison by a die, and  
blowing the air into the tubular parison, to form the tubular parison with the die."

2 Purpose of Amendment

The invention according to Claim 1 of the scope of claims is to solve the problem (hereinafter referred to as "Problem before the Amendment"), "provide a method for producing a composite preform that allows a preform to smoothly fit into a plastic member and has high production efficiency" ([0008]) by specifying "a step of cooling the preform and/or heating the plastic member".

The Amendment is to add the following constitution, regarding the "tubular plastic member", which is a matter necessary for specifying the invention recited in Claim 1 before the Amendment: "obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison die, and blowing the air into the tubular parison, to form the tubular parison with the dies". Regarding the added constitution, the specification of the present application describes that the "plastic member" is "obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison die, and blowing the air into the tubular parison, to form the tubular parison with the dies" so that "the design of a resulting plastic member can be changed by changing the design of die, and a plastic member having high adhesion to a preform can be manufactured" ([0050]).

Accordingly, the invention according to Claim 1 after the Amendment is to solve a new problem, which did not exist before the Amendment, "the design of a resulting plastic member can be changed by changing the design of die, and a plastic member having high adhesion to a preform can be manufactured" by specifying the "plastic member" with the matter, "obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison die, and blowing the air into the tubular parison, to form the tubular parison with the die". Thus, it cannot be said that the invention according to Claim 1 before and after the Amendment are to solve the same problem.

The Amendment is not intended for restriction of the scope of claims (so-called restriction in a limited way) which is in accordance with the provision of Article 17-2(5)(ii) of the Patent Act.

It cannot be also said that the Amendment is intended for other items listed in Article 17-2(5) of the Patent Act.

### 3 Judgment on Independent requirements for patentability

For the reasons indicated in 2 above, a judgment is made that the Amendment should be dismissed. If the amendment on Claim 1 is intended for restriction in a limited way, it will be examined whether the invention according to Claim 1 after the Amendment (hereinafter referred to as "the Amended Invention") falls under the provisions of Article 126(7) of the Patent Act which is applied mutatis mutandis in the provisions of Article 17-2(6) of the Patent Act. As described below, it should be said that the Amendment is in breach of the above requirements.

#### (1) The Amended Invention

The Amended Invention is as described in 1 (2) above.

(2) Described matters in the Cited Documents

A Cited Document 1

(A) Japanese Unexamined Patent Application Publication No. 2015-128857 (the application published on July 16, 2015, hereinafter referred to as "Cited Document 1"), which is a document cited in the reasons for refusal stated in the examiner's decision and distributed or made publicly available through an electric telecommunication line prior to the filing of the application, describes the following matters with drawings.

"[Claim 1]

A blow molding method for molding a composite container comprising:  
a step of preparing a plastic material-made preform;  
a step of forming a composite preform having the preform and the plastic-made member closely stuck to the outside of the preform by arranging the plastic-made member to surround the outside of the preform;

a step of heating the composite preform and inserting it into a blow molding die;  
and

a step of performing blow molding on the composite preform in the blow molding die to integrally expand the preform of the composite preform and the plastic-made member."

"[Claim 8]

A composite preform having  
a plastic material-made preform and  
a plastic-made member arranged to surround the outside of the preform, wherein  
the plastic-made member is closely stuck to the outside of the preform."

"[0001]

This invention relates to a blow molding method, a composite preform, a composite container, and a plastic-made member."

"[0006]

This invention takes the above points into consideration, and is intended to provide a blow molding method, a composite preform, a composite container, and a plastic-made member which can add various functions or characteristics to a container."

"[Effect of the Invention]

[0029]

According to the Invention, blow molding is performed on a composite preform in a blow molding die to integrally expand a preform of the composite preform and a

plastic-made member. Consequently, a preform (container body) and a plastic-made member can be formed of different members, and various functions or characteristic can be added to a composite container by appropriately selecting the kind or shape of the plastic-made member."

"[0033]

The composite container 10A shown in FIG. 1 and FIG. 2 is, as described later, is obtained by integrally expanding a preform 10a of a composite preform 70 and a plastic-made member 40a by performing biaxial stretch blow molding on the composite preform 70 (see FIG. 3) including the preform 10a and the plastic-made member 40a using a blow molding die 50.

[0034]

The above composite container 10A includes a container body 10 made of a plastic material located inside, and a plastic-made member 40 closely stuck to the outside of the container body 10."

"[0054]

As shown in FIG. 3, the composite preform 70 includes a plastic material-made preform 10a and a bottomed cylindrical plastic-made member 40a arranged outside the preform 10a."

"[0068]

As shown in FIG. 3 and FIG. 4 (a), the plastic-made member 40a has a bottomed cylindrical shape as a whole, and it may include a cylindrical trunk part 41 and a bottom part 42 joined to the trunk part 41. In this case, the bottom part 42 of the plastic-made member 40a covers the bottom part 30a of the preform 10a, thereby adding various functions or characteristics also to the bottom part 30 as well as the trunk part 20 of the composite container 10A."

"[0071]

The blow molding method in this embodiment (method for producing the composite container 10A) is described with FIG. 5 (a) to (f).

[0072]

A plastic material-made preform 10a is prepared first (see FIG. 5 (a)). In this case, the preform 10a may be formed by injection molding using an injection molding machine, which is not shown, or the like.

[0073]

By arranging a plastic-made member 40a outside the preform 10a, a composite preform 70 is formed which has a preform 10a and the plastic-made member 40a closely stuck to the outside of the preform 10a (see Fig. 5 (b)). In this case, the plastic-made

member 40a has a bottomed cylindrical shape as a whole, including a cylindrical trunk part 41 and a bottom part 42 joined to the trunk part 41. The plastic-made member 40a is mounted so as to cover all area of the trunk part 20a excluding a section corresponding to a neck part 13 of the container body 10 and the entire area of the bottom part 30a.

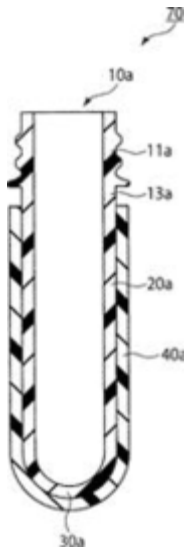
[0074]

In this case, a plastic-made member 40a having an inner diameter which is equal to or slightly smaller than an outer diameter of a preform 10a may be pushed into the preform 10a to be closely stuck to an outer surface of the preform 10a. Alternatively, a heat-shrinkable plastic-made member 40a arranged on an outer surface of the preform 10a may be heated to 50-100°C for heat shrinkage to be closely stuck to the outer surface of the preform 10a.

[0075]

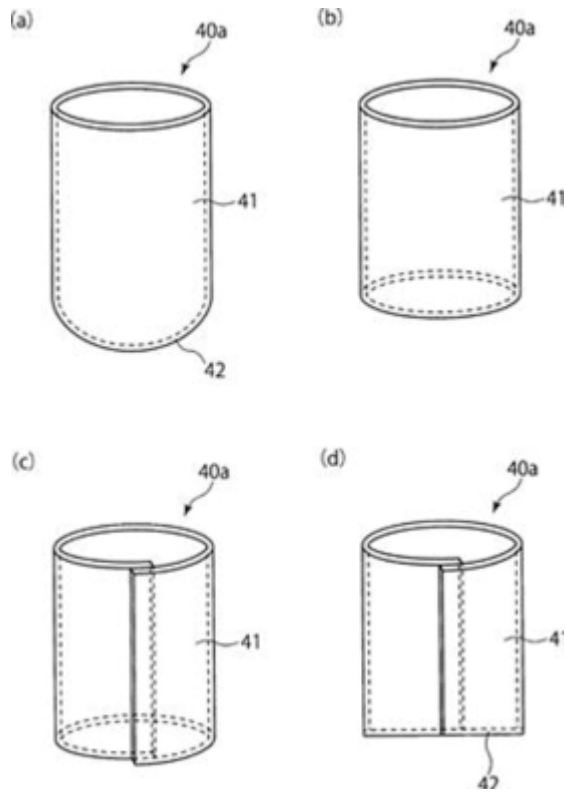
Accordingly, by closely sticking a plastic-made member 40a to the outside of a preform 10a in advance to form the composite preform 70, a series of processes (FIG. 5 (a) to (b)) for forming the composite preform 70 and a series of processes (FIG. 5 (c) to (f)) for forming the composite container 10A by blow molding can be carried out in different places (e.g., factories)."

"[FIG. 3]



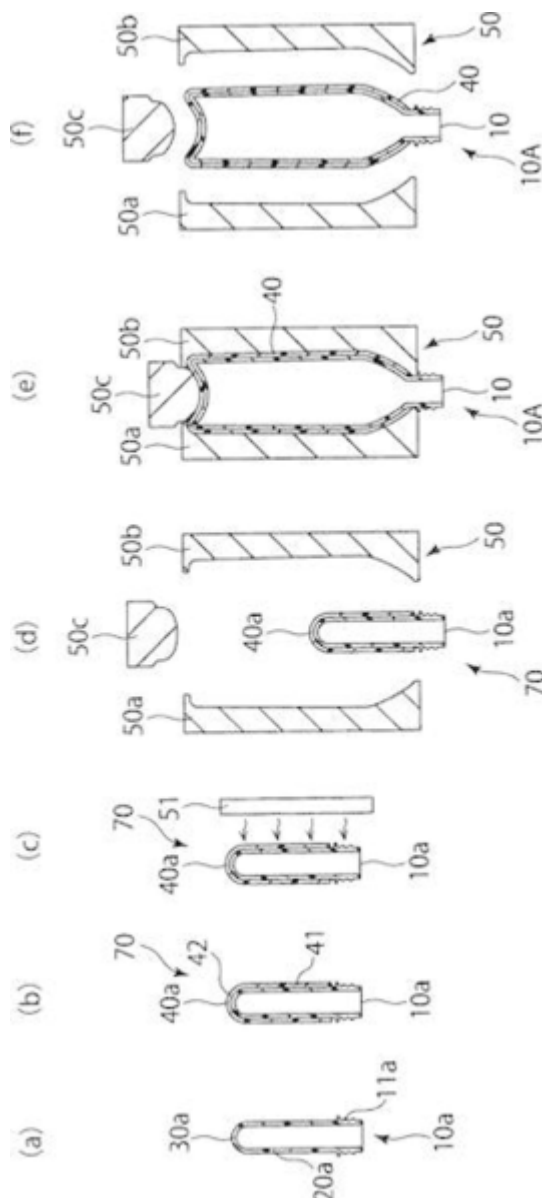
"

"[FIG. 4]



"

"[FIG. 5]



"

**(B) Cited Invention**

Reviewing the described matters in the Cited Document 1, especially the matters described regarding the embodiment of the invention, it is recognized that the Cited Document 1 describes the following invention (hereinafter referred to as "Cited Invention").

"A method for producing a composite preform 70 comprising:

    a step of preparing a plastic material-made preform 10a;

    a step of preparing a bottomed cylindrical plastic-made member 40a having an inner diameter which is equal to or slightly smaller than an outer diameter of the preform



10a; and

a step of pushing the plastic-made member into the preform 10a so as to be closely stuck to an outer surface of the preform 10a."

## B Cited Document 2

Japanese Unexamined Patent Application Publication No. 2002-248697 (the application published on September 3, 2002, hereinafter referred to as "Cited Document 2"), which is a document cited in the reasons for refusal stated in the examiner's decision and distributed or made publicly available through an electric telecommunication line prior to the filing of the application, describes the following matters with drawings.

"[Claim 1] A method of forming a composite core comprising the steps of: providing a standard sized hollow cylindrically shaped tube made of a fiberglass resin composite, the tube having an inner surface and an outer surface, and defining an inner diameter an outer diameter, and a thickness; and providing a rigid sleeve made of extruded polypropylene or other polymer comprising a polished outer surface and an inner surface, and defining an inner diameter, an outer diameter, and a thickness, wherein at room temperature, the inner diameter of the rigid sleeve is smaller than the outer diameter of the tube and larger than the inner diameter of the tube, the method comprising the steps of: heating the rigid sleeve, wherein the inner diameter of the sleeve is increased to a dimension greater than the outer diameter of the tube; sliding the rigid sleeve over the cylindrical tube; and cooling the rigid sleeve so that the inner diameter of the sleeve shrinks toward its original diameter and contacts the outer surface of the tube in an interference fit."

"[0001]

[Field of the Invention] The present invention relates to a composite core for the winding of web material. In particular the invention is directed to a sleeve for covering a cylindrical tube.

[0002]

[Prior Art] Web material, such as paper products and the like, is typically mechanically wound onto a rotating core member. Covers are commonly applied to winding web cores to improve the performance of the winding process. The use of a cover diminishes the occurrence of damage to the web during winding, thereby reducing the necessity to discard deformed webs. The covers deform on the outer surface to accommodate irregularities in the web.

[0003] Developments in the use of cores with covers have resulted in several methods of application of plastic covers to core members. The application of heat or pressurized air to either the core or tube members changes their diameter, facilitating the overlapping connection of the two.

[0004] For example, U.S. Pat. No. 2,659,547 (Broadbent et al.) shows a cylindrical barrel covered by a sleeve, wherein the sleeve is heated to expand its dimensions sufficiently so that it can be slid over the barrel. As the sleeve cools, it contracts to form a tight fit between itself and the barrel."

"[0010] To assemble the composite core, the sleeve is heated to expand the diameter of its inner surface so that it can be slid over the tube. Thereafter, the sleeve is allowed to cool to room temperature, which causes the diameter of its inner surface to contract into engagement with the outer surface of the tube, yielding a tight fit. Alternatively, the diameter of the outer surface of the tube may be reduced by cooling, drying, or other techniques."

"[0011]

[Embodiments of the invention] In the drawings, where like numerals indicate like elements, there is shown a composite core in accordance with the present invention. As shown in FIG. 1, a composite core 10 according to the present invention includes a cylindrical tube 12 and a rigid sleeve 14 for the winding of web material 16. The tube 12 and sleeve 14 are in communication with one another in an overlapping concentric relationship. The overlapping relationship is formed by an interference fit, heat fit, or adhesive connection between the tube 12 and the sleeve 14, as will be described in more detail below.

[0012] As shown in FIG. 2, the cylindrical tube 12 is hollow and forms the base of the composite core for the winding of web material. The tube 12 has an inner surface 18 and an outer surface 20 which define an inner diameter 22 and an outer diameter 24, respectively. The tube 12 may be attached to a rotating means, providing the impetus for winding web material around the composite core.

[0013] The rigidity of the tube 12 is provided by the hardness of the material and the thickness of the sheet forming the tube 12. Preferably, the tube is formed of any one of fiberglass resin composite with a Shore D Hardness of 90, paper resin composite with a Shore D Hardness of 88, and paper with a Shore D Hardness of 62.

[0014] Fiberglass pipe is used to form a high strength tube. The thickness of tube 12, the difference between the outer diameter 24 and inner diameter 22, is sufficient to ensure that the tube 12 maintains its shape when the sleeve 14 is disposed over the tube 12 in an interference fit.

[0015] The sleeve 14 is hollow, forming a cover for the tube 12, and provides the surface for the winding web material 16. The sleeve 14 has an inner surface 26 and an outer surface 28 which define an inner diameter 30 and an outer diameter 32, respectively. The outer surface 28 is adapted to have web material wound thereon. The sleeve 14 has an inner diameter 30 that is smaller than the outer diameter 24 of the tube 12. The sleeve 14 is slid over the tube 12, wherein the sleeve inner surface 26 contacts the tube outer surface 20.

[0016] The sleeve 14 is made of a rigid material, wherein the rigidity is achieved by the properties of the material and the thickness of the sheet forming the sleeve 14. Preferably the rigid sleeve 14 is formed from extruded pipe material such as polypropylene, polystyrene, nylon ABS, or a combination thereof. The sleeve 14 is of sufficient thickness to prevent irregularities in and collapse of the sleeve 14 during the winding process."

"[0022] As shown in FIG. 2, at room temperature the outer diameter 24 of tube 12 is larger than the inner diameter 30 of sleeve 14, but smaller than the outer diameter 32 of the sleeve 14. Placement of the sleeve 14 over the tube 12 is achieved by a heat fit.

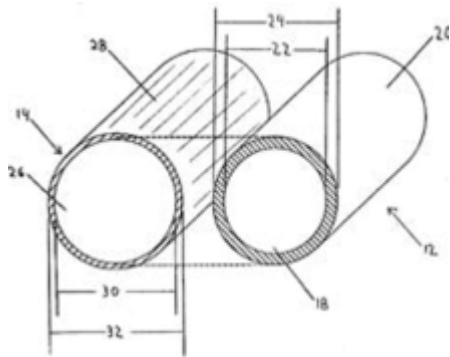
[0023] Heat is applied to the sleeve 14 through the use of a heat source, such as an oven or the like. When heat is applied, thermal expansion of the inner diameter 30 of the sleeve 14 occurs, increasing the inner diameter to a length greater than the outer diameter 24 the tube 12. See FIG. 3. For example, at room temperature the outer diameter 24 of the 6-inch fiberglass resin composite tube, as described above, is 6.475 inches, while the inner diameter 30 of the polypropylene and polystyrene sleeve 14 is 6.400 inches. When the sleeve 14 is heated to a temperature between 275 and 300 degrees Fahrenheit, the inner diameter 30 of the sleeve 14 expands to approximately 6.500 inches. Once the sleeve inner diameter 30 has expanded to greater than the outer diameter 24 of the tube 12, the sleeve 14 is slid over the tube 12, as seen in FIG. 4.

[0024] The properties of the polypropylene and polystyrene sleeve 14 formed by an extrusion process permit the sleeve 14 to remember its original diameter. As the sleeve 14 cools to room temperature, the inner diameter 30 of the sleeve 14 shrinks down into mating engagement with the tube 12. The resulting interference between the tube 12 and the sleeve 14 yields a very tight fit. As shown in FIG. 5, the inner surface 26 of sleeve 14 shrinks into an interference fit with the outer surface 20 of tube 12, forming the composite core.

[0025] Alternatively, the process of applying a sleeve to a paper tube may include drying the paper tube to reduce the moisture content prior to sliding the sleeve 14 thereon. If necessary, the outer diameter 24 of a tube 12 made of fiberglass may be reduced by

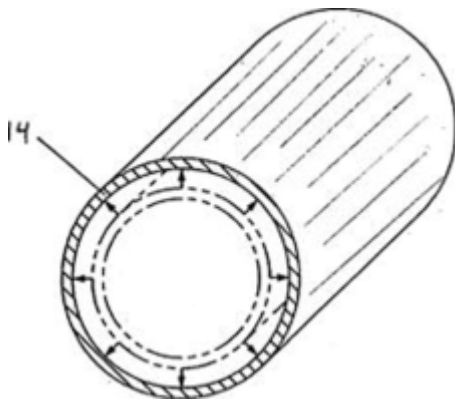
cooling."

"[FIG. 2]



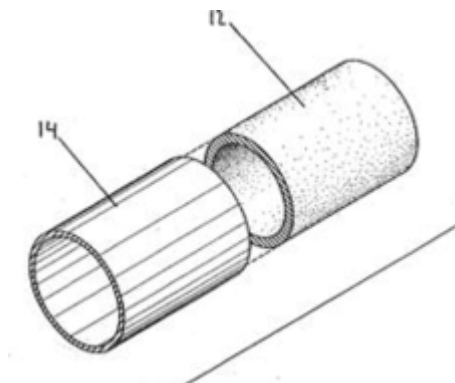
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"[FIG. 3]



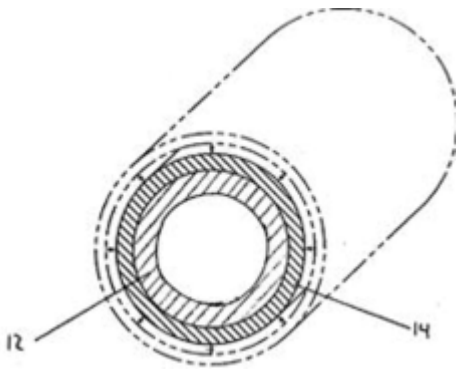
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"[FIG. 4]



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"[FIG. 5]



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### C Cited Document 3

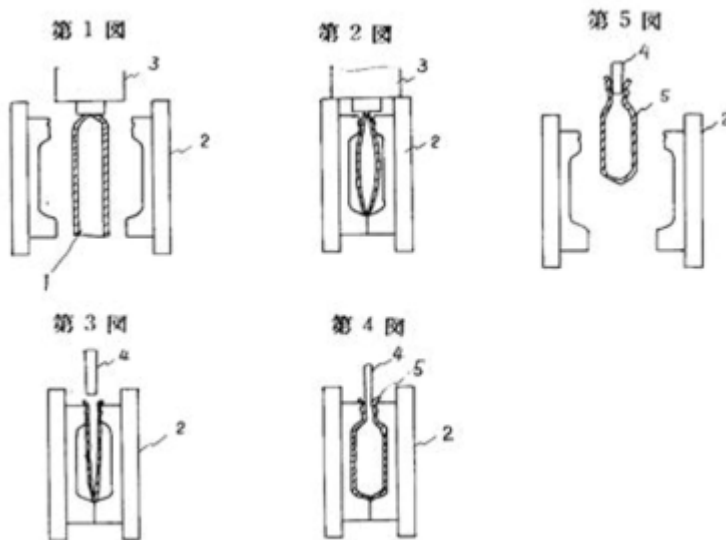
Japanese Unexamined Patent Application Publication No. S57-12619 (the application published on January 22, 1982, hereinafter referred to as "Cited Document 3"), which is a document distributed or made publicly available through an electric telecommunication line prior to the filing of the application, describes the following matters with drawings.

"In FIG. 1, a multilayer parison (1) is extruded from a multilayer die head (3), and a preform bottle die (2) is mounted on a platen of a molding machine. The preform bottle die moves to under the die head (3) where the parison is extruded.

As shown in FIG. 2, in this position, the preform bottle die (2) is closed and holds the parison (1). The parison (1) is subjected to thickness control so that an easy-to-stretch position may be thick and a difficult-to-stretch position may be thin. In FIG. 3, the parison having an upper part cut by a heat cutter moves to a position under the calibration with a blow mandrel. As shown in FIG. 4, the blow mandrel (4) is driven to suck air, thereby forming a bottomed parison (5). A screw diameter of the bottle is also formed simultaneously. The bottomed parison (5) is shaped preferably so that the subsequent stretch process is performed most easily in relation to the final bottle shape.

As shown in FIG. 5, the preform bottle die (2) is opened. At this time, burr formed on the bottom part is deflashed and the bottle fixed to the mandrel (4) is raised."  
(p. 4 upper left column l. 5 to upper right column l. 6)

"



第 1 図 FIG. 1

第 2 図 FIG. 2

第 3 図 FIG. 3

第 4 図 FIG. 4

第 5 図 FIG. 5

" (p.5 lower column)

#### D Cited Document 4

Japanese Unexamined Patent Application Publication No. 2001-170994 (the application published on June 26, 2001, hereinafter referred to as "Cited Document 4"), which is a document distributed or made publicly available through an electric telecommunication line prior to the filing of the application, describes the following matters with drawings.

"[0001]

[Field of the Invention] This invention relates to the structure of a preform that is biaxially stretched and blow molded into a synthetic resin bottle, and particularly to a type of preform that has been molded by blow molding means, among preforms that have been molded into the primary molded intermediates of a cylindrical shape having a closed end.

[0002]

[Prior Art] As synthetic resin preforms that have been molded into the primary molded intermediates and are to be biaxially stretched and blow molded into bottles, there are known those preforms of a cylindrical shape having a closed end, which have been

molded by injection molding means or blow molding means. As compared to the injection molded preforms, the blow molded preforms can be obtained at less expensive costs, can be more freely molded into various shapes, and are easy to adopt the laminated wall structures.

[0003] Thus, the blow molded preforms have the following advantages. Their cost of equipment is lower than the corresponding cost for injection-molded preforms, and the blow-molded products can be sold at a lower price than the injection molded ones. Because they are highly versatile in selecting shapes, the preforms can be molded into a shape that fits in with the appearance of a bottle to be molded. Because they can easily adopt the laminated wall structures, the thin-wall bottles can be obtained while desired physical properties can be effectively maintained."

"[0016] In the invention of Claim 4, even if a groove-like sink mark is formed due to welding failure in the surface of the pinch-off portion (the inner surface of the bottom shell portion) which is welded by the crushing power of the blow mold when the parison is pinched off, the reinforcing rib can make up for the decrease in the weld area caused by this sink mark. When the preform is biaxially stretched and blow molded into a bottle, the reinforced pinch-off portion can be blow molded without rupture, thus giving assurance for the stable biaxial-stretching and blow-molding operation."

"[0018] FIG. 2 is a front view, with partial insection, of the entire preform 1' according to the first shape embodiment of this invention in which the cylindrical, extrusion-molded parison P has been blow molded into the cylindrical preform of this invention having a closed end. Helical ridges are disposed on the outer circumference of the short cylindrical mouth portion, and the neck ring 3 is also disposed around the lower part of the mouth portion. Downward from the mouth portion 2 there is the bulging shoulder portion 4' (the portion to be molded into the shoulder 4 of the bottle 1) having a diameter that widens slightly in the downward direction. Downward from this bulging shoulder portion 4' there is the cylindrical barrel portion 5' (the portion to be molded into the barrel 5 of the bottle 1). Under the barrel portion 5' there is the bottom shell portion 7' (the portion to be molded into the bottom 7 of the bottle 1), which has a shape of an almost spherical shell. In addition, the inner overhang wall portion 3' is disposed on the opposite side of the neck ring 3, and has a diameter that widens in the downward direction.

[0019] This inner overhang wall portion 3' is disposed on the inner circumference on the opposite side of the neck ring 3; i.e., on the border between the mouth portion 2 and the bulging shoulder portion 4' to be molded into the shoulder 4 of the bottle 1. The diameter of this portion 3' widens in the downward direction. Prior to the blow molding of parison P into the preform 1', a core guide 11 equipped with an air blow nozzle is thrust

into the upper end of the parison P to form the mouth portion 2 (See Fig. 5). At that time, a thick area tends to be formed in the lower part of the inner wall of the mouth portion 2 because of the core guide 11 that has been thrust. This thick area is absorbed in the inner overhang wall portion 3' when the parison is blown molded into the preform. Thus, the thick area is actually never formed in the lower part of the inner overhang wall under the mouth portion 2."

"[Description of Symbols]

1; Bottle

1'; Preform

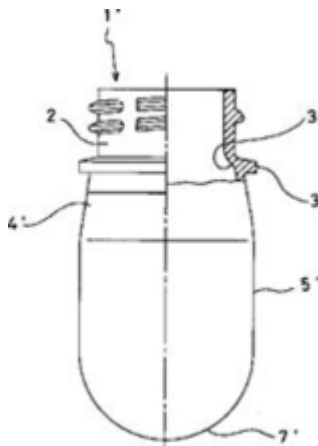
... (Omitted) ...

10; Blow mold

... (Omitted) ...

P; Parison"

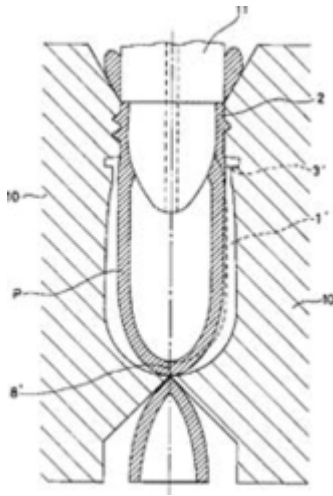
"[FIG. 2]



"

"[FIG. 5]





"

#### E Cited Document 5

Japanese Unexamined Patent Application Publication No. 2003-71910 (the application published on March 12, 2003, hereinafter referred to as "Cited Document 5"), which is a document distributed or made publicly available through an electric telecommunication line prior to the filing of the application, describes the following matters with drawings.

"[0001]

[Field of the Invention] This invention relates to the structure of a preform that is biaxially stretched and blow molded into a synthetic resin bottle, and particularly to a type of preform that has been molded by blow molding means, among preforms that have been molded into the primary molded intermediates of a cylindrical shape having a closed end.

[0002]

[Prior Art] As the synthetic resin preforms that have been molded into the primary molded intermediates and are to be biaxially stretched and blow molded into bottles, there are known those preforms of a cylindrical shape having a closed end, which have been molded by injection molding means or blow molding means. As compared to the injection molded preforms, the blow molded preforms can be obtained at less expensive costs, can be more freely molded into various shapes, and easily adopt the laminated wall structures.

[0003] Thus, the blow molded preforms have the following advantages. Their cost of equipment is lower than the corresponding cost for injection-molded preforms, and the blow-molded products can be sold at a lower price than the injection molded ones. Because they are highly versatile in selecting shapes, the preforms can be molded into a shape that fits in with the appearance of a bottle to be molded. Because they easily adopt

the laminated wall structures, the thin-wall bottles can be obtained while desired physical properties can be effectively maintained."

"[0076] FIGS. 8-11 show the preform of the laminated wall structure in the 8th embodiment of the laminated wall structure of the invention. The wall comprises the outer layer 1a of a synthetic resin material, such as polyethylene, polypropylene, or polyethylene terephthalate, to be molded as the outer shell that has a necessary shape-retaining ability; the inner layer 1c of a synthetic resin material, such as nylon, ethylene vinyl alcohol copolymer, or polyethylene terephthalate, which is less compatible with the material of the outer layer 1a and which is molded into a bag capable of deflective deformation; and the vertical slip-like adhesive layer 13 and the bottom adhesive layer 14 of an adhesive resin having a full adhesive property for both of the outer and inner layers 1a and 1c.

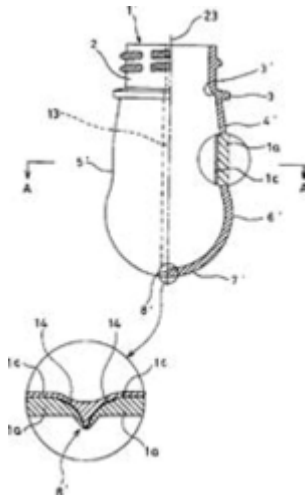
... (Omitted) ...

[0080] The preform 1' provided with the vertical slip-like adhesive layer 13 and bottom adhesive layer 14 can be prepared by the process described below. (See FIG. 11) The multi-layer parison P is molded by co-extruding, from the dies 22 for multi-layer parison use, the multi-layers comprising the cylindrical outer layer 1a, the cylindrical inner layer 1c located inside the outer layer 1a, a pair of the vertical slip-like adhesive layers disposed in axial symmetry on the parting line 23, and the cylindrical ring-like adhesive layer 16 that is disposed between the outer layer 1a and the inner layer 1a intermittently at a predetermined interval.

[0081] In contrast to the outer layer 1a, the inner layer 1c, and a pair of the vertical slip-like adhesive layers, all of which are co-extruded continuously, the ring-like adhesive layer 16 is co-extruded, not continuously but intermittently, by the controlled pressurization and depressurization of the accumulator with which the resin feed section is equipped for the ring-like adhesive layer.

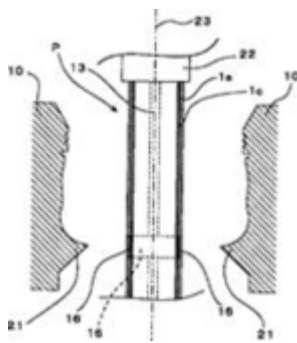
[0082] The pinch-off section 21 of the split blow mold 10 pinches off the multi-layer parison P thus molded, laterally in the area where the ring-like adhesive layer 16 has been formed. When the cut parison is blow molded, this ring-like adhesive layer 16 develops into the bottom adhesive layer 14, such as described in the preform 1' of the laminated wall structure in the eighth embodiment of this invention."

"[FIG. 8]



"

"[FIG. 11]



"

### (3) Comparison

A The Amended invention and the Cited Invention are compared below.

The "plastic-made member 40a" in the Cited Invention, which has a "bottomed cylindrical" shape, corresponds to the "tubular plastic member" in the Amended Invention.

The "step of pushing the plastic-made member into the preform 10a so as to be closely stuck to an outer surface of the preform 10a" in the Cited Invention is considered, from the viewpoint of the structure of the "plastic-made member 40a" and the "preform 10a", to mean that the outer surface of the "preform 10a" is fitted into the "plastic-made member 40a" so as to be closely stuck to an inner surface of the "plastic-made member 40a". Thus, the above step in the Cited Invention corresponds to the "step of fitting the preform into the plastic member so that an outer surface of the preform may be in internal contact with an inner surface of the plastic member" in the Amended Invention.

B Accordingly, the Amended Invention and the Cited Invention have the following

corresponding feature.

<Corresponding Feature>

"A method for producing a composite preform comprising:

a step of preparing a preform made of plastic material;

a step of preparing a tubular plastic member; and

a step of fitting the preform into the plastic member so that an outer surface of the preform may be in internal contact with an inner surface of the plastic member."

C The Amended Invention and the Cited Invention have the following different features.

<Different Feature 1>

Between the step of preparing a tubular preform made of plastic material and the step of fitting the preform into the plastic member, the Amended Invention specifies including "a step of cooling the preform and/or heating the plastic member". The Cited Invention does not specify including the above step.

<Different Feature 2>

Regarding the tubular plastic member, the Amended Invention specifies as follows: "the tubular plastic member is obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison by a die, and blowing the air into the tubular parison, to form the tubular parison with the die". The Cited Invention does not specify how the plastic member has been obtained.

(4) Judgment

A Regarding Different Feature 1

The Cited Invention is configured to push the "plastic-made member 40a" into the "preform 10a" located inside thereof. The "plastic-made member 40a" "has an inner diameter which is equal to or slightly smaller than an outer diameter of the preform 10a". Considering the relationship in diameter between the "plastic-made member 40a" and the preform 10a", it is an obvious problem for a person skilled in the art to improve production efficiency by smoothly executing the pushing step of the Cited Invention which is considered to be difficult.

In fitting a cylindrical member into a substantially tubular member, the cylindrical member having an inner diameter equal to or slightly smaller than an outer diameter of the substantially tubular member, a technique of smoothly fitting the cylindrical member to the substantially tubular member by expanding the tubular member by heating or shrinking the substantially tubular member by cooling is, as described in Cited Document

2, etc., a well-known conventional technique (hereinafter referred to as "Well-known Conventional Technique 1") which has been widely known in any technical field.

Accordingly, a person skilled in the art could have easily conceived of applying the above Well-known Conventional Technique 1 in solving the obvious problem in the Cited Invention.

#### B Regarding Different Feature 2

In producing a cylindrical member made of resin and having a bottom part, using a method of forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison by a die, and blowing the air into the tubular parison, to form the tubular parison with the die; i.e., direct blow molding, is, as described in Cited Documents 3 to 5, etc., a well-known conventional technique (hereinafter referred to as "Well-known Conventional Technique 2").

Considering that the "plastic-made member 40a" in the Cited Invention has "a bottomed cylindrical shape", a person skilled in the art could have easily conceived of applying the above Well-known Conventional Technique 2 as a method for producing the "plastic-made member 40a" in the Cited Invention.

#### C Regarding Advantageous effect

In light of the above Well-known Conventional Technique 1, the advantageous effect to be produced by the Amended Invention (see [0021], etc. of the specification of the present application) that a preform can be smoothly fit into a plastic member can be easily predicted by a person skilled in the art, and it cannot be regarded as a particularly distinguishing effect.

In light of the fact that the manufacturing method using direct blow molding in the above Well-known Conventional Technique 2 uses a die, a person skilled in the art can also predict the advantageous effect (see [0050] of the specification) that the design of a resulting plastic member can be changed by changing the design of die, and a plastic member having high adhesion to a preform can be manufactured, and the advantageous effect cannot be regarded as a particularly distinguishing effect.

#### D Regarding Appellant's allegation

The Appellant alleges in the written opinion as follows: The invention disclosed in Cited Document 2 relates to a core member on which paper or the like is wound, and it is significantly different from the technical field to which the Invention belongs. Thus, the technical matters described in Cited Document 2 cannot be applied to the Cited

Invention.

However, Cited Document 2 is only an example of well-known conventional techniques in any technical field. In light of the obvious problem in the Cited Invention, it cannot be said that there is no relationship between the Cited Invention and the Well-known Conventional Technique 1 which can be recognized from the Cited Document 2, etc. No particular reason for prohibiting application of the Well-known Conventional Technique 1 to the Cited Invention is found.

The Appellant alleges in the written appeal as follows: None of the documents describes that a tubular plastic member is obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison by a die, and blowing the air into the tubular parison, to form the tubular parison with the die.

However, as a method for producing a cylindrical member made of resin and having a bottom part, such as a tubular plastic member in the Amended Invention, using direct blow molding is a well-known conventional technique (Well-known Conventional Technique 2) as described above. Even though there is no document describing the same manufacturing method as the Amended Invention regarding the tubular plastic member into which a preform is fitted, it cannot be said that the above Different Feature 2 cannot be easily conceived, as examined in B.

Therefore, the allegations of the Appellant cannot be accepted.

#### E Summary

The Amended Invention could have been easily made by a person skilled in the art on the basis of the Cited Invention, the Well-known Conventional Technique 1, and the Well-known Conventional Technique 2.

#### (5) Summary on Independent requirements for patentability

As above, the Amended Invention should not be patented independently at the time of patent application under the provisions of Article 29(2) of the Patent Act.

#### 4 Closing of Decision to dismiss amendment

As described above, the purpose of Amendment does not relates to any of the matters stipulated in Article 17-2(5), and is in breach of the provisions of Article 126(7) of the Patent Act which is applied mutatis mutandis in the provisions of Article 17-2(6) of the Patent Act. Thus, the Amendment should be dismissed under the provisions of

Article 53(1) of the Patent Act which is applied mutatis mutandis pursuant to the provisions of Article 159(1) of the Patent Act.

Therefore, the decision is made in accordance with Conclusion of Decision to Dismiss Amendment.

### No. 3 Regarding the Invention

#### 1 The Invention

The written amendment submitted on June 10, 2020 was dismissed as above. The inventions according to Claims 1 to 4 of the present application are as specified by the matters recited in Claims 1 to 4 of the scope of claims amended by the written amendment submitted on November 7, 2019. The invention according to Claim 1 (hereinafter referred to as "the Invention") is as described in No. 2 [Reason] 1 (1), which is specified by the matters recited in Claim 1.

#### 2 Reasons for refusal stated in the examiner's decision

The reasons for refusal stated in the examiner's decision include the following reason: The Invention could have been easily made by a person skilled in the art before the filing of the application on the basis of the invention described in Cited Document 1, which is a main cited document, which was distributed or made publicly available through an electric telecommunication line prior to the filing of the application. Thus, the Appellant should not be granted a patent for the invention under the provisions of Article 29(2) of the Patent Act.

#### 3 Cited documents

The described matters in Cited Document 1 and Cited Document 2 cited in the reasons for refusal stated in the examiner's decision are as described in No. 2 [Reason] 3 (2).

#### 4 Comparison / Judgment

The Invention does not specify the matter, "the tubular plastic member is obtained by forming a tubular parison by melting a resin material by heat to be extruded into a tubular form, holding the tubular parison by a die, and blowing the air into the tubular parison, to form the tubular parison with the die" in the comparison with the Amended Invention examined in No. 2 [Reason] 3.

Accordingly, the Amended Invention which includes all of the matters specifying the Invention and corresponds to one to which the matters have been added is, as

examined in No. 2 [Reason] 3, could have been easily conceived from the Cited Invention. Thus, the Invention could also be made easily by a person skilled in the art as well.

#### No. 4 Closing

As above, the Appellant should not be granted a patent for the Invention under the provisions of Article 29(2) of the Patent Act. Thus, the present application should be rejected without examining inventions according to other claims.

Therefore, the appeal decision shall be made as described in the conclusion.

April 26, 2021

Chief administrative judge: SUTO, Yasuhiro  
Administrative judge: HOSOI, Ryuji  
Administrative judge: IWATA, Kenichi