# Trial decision

Invalidation No. 2015-800200

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The case of trial regarding the invalidation of Japanese Patent No. 5623472, entitled "ORTHODONTIC APPLIANCE" between the parties above has resulted in the following trial decision.

## Conclusion

The demand for trial of the case was groundless.

The costs in connection with the trial shall be borne by the demandant.

#### Reason

#### No. 1 History of the procedures

The patent No. 5623472 relates to Japanese Patent Application No. 2012-165371 filed on July 26, 2012, and the establishment of the patent right on the invention relating to Claims 1-5 was registered on October 3, 2014.

A trial for invalidation of the case was demanded on October 29, 2015 by the demandants of the trial for invalidation of the case, YANAGISAWA, Munemitsu, Rocky Mountain Morita Corporation, and BIODENT CORPORATION (hereinafter referred to as "the demandant"). The demandant demanded the decision, "the patent for the invention according to Claims 1 to 5 in scope of claims of Patent No. 5623472 shall be invalidated. The costs in connection with the trial shall be borne by the demandee." The outline of the procedures of the trial of the case is as follows.

October 29, 2015	Demand for the invalidation trial of the case
January 25, 2016	Written reply
March 1, 2016	Oral proceedings statement brief (demandant)
March 10, 2016	Oral proceedings statement brief (demandee)
March 24, 2016	Oral proceedings

#### No. 2 The patent invention

The inventions relating to Claims 1-5 of the patent of the case are as follows. (hereinafter, the "inventions relating to Claim 1-5" are referred to as "the Inventions 1-5", respectively).

# "[Claim 1]

An orthodontic appliance including:

a base having a U-shape in plan view, and placed between tooth rows of an upper jaw and a lower jaw;

an upper jaw side outer peripheral wall projecting upward from an outer peripheral edge of the base and contacting an upper lip from the inside;

a lower jaw side outer peripheral wall projecting downward from the outer peripheral edge of the base, contacting a lower lip from the inside, and contacting a front tooth part of the lower jaw from the outside;

an upper jaw side inner peripheral wall projecting upward from the inner peripheral edge of the base and contacting a front tooth part of the upper jaw from the inside;

and a tongue position correcting flange extended downward from the inner peripheral edge of the base and configured to slip a gradually horizontally bent cross-sectionally curved flange part beneath the tongue,

the orthodontic appliance being configured so that an inner peripheral surface of the upper jaw side outer peripheral wall and an outer peripheral surface of the upper jaw side inner peripheral wall are located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap  $\Delta$  between the inner peripheral surface of the upper jaw side outer peripheral wall and the front tooth part,

and the lower jaw side outer peripheral wall being formed in cross-sectional mound shape, which is laterally thick with respect to a vertically asymmetric base front part having a wide top surface and a narrow lower surface.

[Claim 2]

The orthodontic appliance described in Claim 1, including the base, the upper jaw side outer peripheral wall, the lower jaw side outer peripheral wall, and the upper jaw side inner peripheral wall, which are formed integrally with an elastic or flexible resin material.

[Claim 3]

The orthodontic appliance described in Claim 1 or Claim 2, having the lower jaw side outer peripheral wall extended along the base, and a lower supporting bar arranged on the inner peripheral surface and externally in contact with the front tooth part of the lower jaw.

[Claim 4]

The orthodontic appliance described in any of Claims 1-3, having the upper jaw side inner peripheral wall extended along the base, and an upper supporting bar arranged on the inner peripheral surface and internally in contact with the front tooth part of the upper jaw.

[Claim 5]

The orthodontic appliance described in one of Claims 1-4, including the base, the upper jaw side outer peripheral wall, the lower jaw side outer peripheral wall, the upper jaw side inner peripheral wall, and the tongue position correcting flange, which are formed integrally with an elastic or flexible resin material."

## No. 3 The demandant's allegation

The demandant demanded a decision, "the patent for the invention according to Claims 1 to 5 in scope of claims of Patent No. 5623472 shall be invalidated. The costs in connection with the trial shall be borne by the demandee," submitted Evidences A No. 1-8 as means of proof, and alleged the following reason for invalidation.

## 1 Reasons for invalidation

The invention relating to Claims 1-5 of the patent of the case could have been easily invented by a person skilled in the art, on the basis of the invention described in Evidence A No. 1 and well-known arts, and the demandee should not be granted a patent for the invention in accordance with the provisions of Article 29-2 of the Patent Act.

The reasons for invalidation of the invention relating to the Claims are as follows.

(1) The invention relating to Claim 1 can be easily invented, on the basis of the invention described in Evidence A No. 1.

(2) The inventions relating to Claims 2-5 can be easily invented, on the basis of the invention described in Evidence A No. 1 and well-known arts. The well-known arts are well-known obviously without citing an example.

(3) The inventions relating to Claims 3 and 4 can be easily invented, on the basis of the invention described in Evidence A No. 1 and well-known arts cited in Evidence A No. 4. (See Demandant 2 in 1st oral proceeding record)

# 2 Means of proof Evidence A No. 1: Microfilm of Japanese Utility Model Application No. S61-10681 (Japanese Unexamined Utility Model Application Publication No. S62-122611) Evidence A No. 2: Japanese Unexamined Patent Application Publication No. 2014-23671

Evidence A No. 3:	Notification of reasons for refusal as of February 17, 2014, of
	Japanese Patent Application No. 2012-165371
Evidence A No. 4:	Specification of U. S. Patent Application Publication No. 2006-0099546
Evidence A No. 5:	Written amendment as of April 28, 2014, of Japanese Patent Application No. 2012-165371
Evidence A No. 6:	Decision of refusal as of May 19, 2014, of Japanese Patent Application No. 2012-165371
Evidence A No. 7:	Written amendment as of June 30, 2014, of Japanese Patent Application No. 2012-165371
Evidence A No 8:	Decision to grant patents as of September 2, 2014, of Japanese Patent Application No. 2012-165371

No. 4 The demandee's allegation

The demandee replied, "the demand for trial of the case was groundless.

The costs in connection with the trial shall be borne by the demandant," and alleges as follows.

The Inventions 1-5 could not have been easily invented by a person skilled in the art, on the basis of the invention described in Evidence A No.1 and well-known arts.

No. 5 Judgment by the body

1 Invention described in publication

(1) Evidence A No. 1

Evidence A No. 1 (hereinafter referred to simply as "A-1") describes the following matters, together with Drawings.

A ""Field of industrial application"

This device relates to a dental functional corrective device to be used for treatment of dental anterior cross-bite." (p. 1 l. 17-l. 19)

B "The gist of the device is a dental functional corrective device including: a horseshoe flat floor body having a planar shape corresponding to teeth alignment; a platy projection formed on an outer rim top face of a part of the floor body corresponding to a front tooth part, and coming into contact with a gum outer surface of an upper jaw; a band-like projection formed on an outer rim bottom face of the part of the floor body corresponding to the front tooth part and coming into contact with an inner surface of a lower lip; and a tongue tip-contact planar slip formed on an inner rim of the part of the floor body corresponding to the front tooth part, and having an upper end slightly projecting beyond a top face of the floor body and a lower end reaching a gum inner surface of a lower jaw, which are integrated with plastic, or the like." (p. 3 l. 1-l. 12)

C "FIG. 1 is a perspective view, FIG. 2 is a front view, FIG. 3 is a side view, FIG. 4 is a top view, FIG. 5 is a sectional view along a line I-I in FIG. 2, and FIG. 6 is a longitudinal side view of a central part in the oral cavity with the device mounted thereon.

In. FIGs., reference numeral 1 denotes the horseshoe floor body having a planar shape corresponding to teeth alignment, and reference numeral 2 denotes the platy projection formed on an outer rim top face of the part A of the floor body 1 corresponding to a front tooth part, and coming into contact with a gum outer surface of an upper jaw. A height of the platy projection 2 is decided according to a patient. The platy projection 2 is curved to suit the gum. Reference numeral 3 denotes the band-like projection formed on an outer rim bottom face of the part A of the floor body 1 corresponding to the front tooth part and coming into contact with an inner surface of a lower lip. Reference numeral 4 denotes the planar slip formed on an inner rim of the part A of the floor body 1 corresponding to the front tooth part, and is configured to prevent a tongue tip from coming into contact with the gum of a lower jaw by bringing the tongue tip into contact with the slip. The planar slip 4 includes an upper end 4' slightly projecting beyond a top face of the floor body 1 and coming into contact with the inner surface of the front teeth, and a lower end 4" projecting to reach a gum inner surface of a lower jaw. Reference numeral 5 denotes a bar-shaped knob projecting on an outer surface of the central part in the platy projection 2, and has a string throughhole 6 formed at its tip." (p. 3 l. 15-p.4 l. 17)

## D ""Effect"

The effect of the device having the above configuration will be described.

A user opens his or her mouth, holds the knob 5 of the device, to be put into the oral cavity. When the user bites the floor body 1 with front teeth 7, 8 to hold it vertically, and closes an upper lip 11 and a lower lip 12, the device is fixed in the oral cavity. In the fixed state, the platy projection 2 is in contact with an outer surface of the gum 9 of the upper jaw, and the projection 3 is in contact with an inner surface of the lower lip 12. The upper end 4' of the planar slip 4 is in contact with an inner surface of

the front teeth 7 of the upper jaw.

The device fixed in the oral cavity of a patient can correct dental anterior crossbite by an effect completely different from that of a conventional corrective device.

The device is configured to correct teeth alignment not by holding and fixing an upper jaw and a lower jaw at normal positions, as with a conventional device, but by moving them forward to make an overbite condition of a patient of anterior cross-bite.

Specifically, when the platy projection 2 comes into contact with an outer surface of the gum 9 of the upper jaw with an appropriate pressure, genioglossal muscle is strained excessively, and the platy projection 2 prevents contact between the upper lip 11 and the gum 9 of the upper jaw, to relax the orbicularis oris muscle. The planar slip 4 brings the tongue tip of the patient of anterior cross-bite, which has always been in contact with the gum of the lower jaw but are prevented from being in contact by the planar slip 4, into contact with the gum of the upper jaw. Thus, the overbite condition is made to correct teeth alignment."

Therefore, the position of the lower jaw is functionally guided to a normal position in a short period of time." (p. 5 l. 6-p. 6 l. 17)

E According to the description in the above extracted matter D, "when the platy projection 2 comes into contact with an outer surface of the gum 9 of the upper jaw with an appropriate pressure, genioglossal muscle is strained excessively, and the platy projection 2 prevents contact between the upper lip 11 and the gum 9 of the upper jaw, ... Thus, the overbite condition is made to correct teeth alignment", and a gap formed between the front teeth 7 and the platy projection 2 shown in FIG. 6, it can be said that the configuration, "an inner peripheral surface of the platy projection 2 and an outer peripheral surface of the upper end 4' of the planar slip 4 are located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap between the inner peripheral surface of the platy projection 2 and the front tooth part" is described.

F According to FIG. 6, it can be said that the platy projection 2 is in internal contact with the upper lip 11.

In light of the matters described in A to D, and matters acknowledged in E and F, Evidence A No. 1 describes the following invention (hereinafter referred to as the "A-1 invention".

"A dental functional corrective device including:

a horseshoe floor body 1 having a planar shape corresponding to teeth alignment;

a platy projection 2 formed on an outer rim top face of a part A of the floor body 1 corresponding to a front tooth part, and coming into internal contact with an upper lip;

a band-like projection 3 formed on an outer rim bottom face of the part A of the floor body 1 corresponding to the front tooth part, coming into internal contact with an inner surface of a lower lip, and coming into external contact with the front tooth part of a lower jaw;

and a planar slip 4 formed on an inner rim of the part A of the floor body 1 corresponding to the front tooth part, and having an upper end 4' in contact with an inner surface of the front teeth 7 of the upper jaw and a lower end 4" projecting to reach a gum inner surface of the lower jaw,

the inner peripheral surface of the platy projection 2 and the outer peripheral surface of the upper end 4' of the planar slip 4 being located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap between the inner peripheral surface of the platy projection 2 and the front tooth part."

## 2 Regarding the Invention 1

## (1) Comparison

The Invention 1 is compared with the A-1 invention.

The "horseshoe floor body 1 having a planar shape corresponding to teeth alignment" in the A-1 invention corresponds, in light of the structure or function thereof, to the "base having a U-shape in plan view, and placed between tooth rows of an upper jaw and a lower jaw" in the Invention 1.

The same applies hereafter; the "a platy projection 2 formed on an outer rim top face of a part A of the floor body 1 corresponding to a front tooth part, and coming into internal contact with an upper lip" in the latter corresponds to the "upper jaw side outer peripheral wall projecting upward from an outer peripheral edge of the base and contacting an upper lip from the inside" in the former,

the "band-like projection 3 formed on an outer rim bottom face of the part A of the floor body 1 corresponding to the front tooth part, coming into internal contact with an inner surface of a lower lip, and coming into external contact with the front tooth part of a lower jaw" in the latter corresponds to the "lower jaw side outer peripheral wall projecting downward from the outer peripheral edge of the base, contacting a lower lip from the inside, and contacting a front tooth part of the lower jaw from the outside" in the former,

the "upper end 4' in contact with an inner surface of the front teeth 7 of the upper jaw, in

the planar slip 4 formed on an inner rim of the part A of the floor body 1 corresponding to the front tooth part" in the latter corresponds to the "upper jaw side inner peripheral wall projecting upward from the inner peripheral edge of the base and contacting a front tooth part of the upper jaw from the inside" in the former,

the description, "the inner peripheral surface of the platy projection 2 and the outer peripheral surface of the upper end 4' of the planar slip 4 being located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap between the inner peripheral surface of the platy projection 2 and the front tooth part" in the latter corresponds to the description, "an inner peripheral surface of the upper jaw side outer peripheral wall and an outer peripheral surface of the upper jaw side inner peripheral wall are located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap  $\Delta$  between the inner peripheral surface of the upper jaw side outer peripheral wall and the front tooth part" in the former,

and the "dental functional corrective device" in the latter corresponds to the "orthodontic appliance" in the former.

The "lower end 4" projecting to reach a gum inner surface of the lower jaw, in the planar slip 4 formed on an inner rim of the part A of the floor body 1 corresponding to the front tooth part" in the latter and the "tongue position correcting flange extended downward from the inner peripheral edge of the base and configured to slip a gradually horizontally bent cross-sectionally curved flange part beneath the tongue" in the former are common in the point of "a flange extended downward from an inner peripheral edge of the base".

The above inventions correspond to each other in the following points,

"the orthodontic appliance including:

the base having a U-shape in plan view, and placed between tooth rows of an upper jaw and a lower jaw;

the upper jaw side outer peripheral wall projecting upward from an outer peripheral edge of the base and contacting an upper lip from the inside;

the lower jaw side outer peripheral wall projecting downward from the outer peripheral edge of the base, contacting a lower lip from the inside, and contacting a front tooth part of the lower jaw from the outside;

the upper jaw side inner peripheral wall projecting upward from the inner peripheral edge of the base and contacting a front tooth part of the upper jaw from the inside;

and the flange extended downward from an inner peripheral edge of the base,

the inner peripheral surface of the upper jaw side outer peripheral wall and the outer

peripheral surface of the upper jaw side inner peripheral wall being located at a distance larger than the thickness of the tooth row of the upper jaw, to form a gap  $\Delta$  between the inner peripheral surface of the upper jaw side outer peripheral wall and the front tooth part",

and they are different from each other in the following two points.

# (The different feature 1)

The flange extended downward from the inner peripheral edge of the base corresponds to the tongue position correcting flange configured to slip a gradually horizontally bent cross-sectionally curved flange part beneath the tongue, in the Invention 1, while corresponding to a flange (the lower end 4" of the planar slip 4) reaching a gum inner surface of a lower jaw, in the A-1 invention.

# (The different feature 2)

The Invention 1 includes a vertically asymmetric base front part having a wide top surface and a narrow lower surface, and a lower jaw side outer peripheral wall is formed in cross-sectional mound shape, which is laterally thick with respect to the base front part. In the A-1 invention, it is unclear whether the base front part is formed in a vertically asymmetric shape having a wide top surface and a narrow lower surface, and the lower jaw side outer peripheral wall (the band-like projection 3) with respect to the front part of the base does not have a laterally thick mound cross section.

# (2) Judgment

The different features are examined as follows.

# A Regarding the different feature 1

In the A-1 invention, the lower end 4" of the planar slip 4 projecting to reach a gum inner surface of a lower jaw prevents the tongue tip of a patient of anterior crossbite, which has always been in contact with the gum of the lower jaw from being contact by such a configuration, and makes the tongue tip being in contact with the gum of the upper jaw (extracted matter D).

The Invention 1 includes the "tongue position correcting flange configured to slip a gradually horizontally bent cross-sectionally curved flange part beneath the tongue" relating to the Different feature 1. The gradually horizontally bent crosssectionally curved flange part slips beneath the tongue, to separate the tongue tip from the front tooth part of the lower jaw, thereby preventing the front tooth part from being pushed by the tongue tip to push out the lower jaw (Specification [0033]). In addition to the effect above, the inner peripheral surface of the upper jaw side inner peripheral wall and an inner surface of a base section of the tongue position correcting flange are joined to form a space for enclosing the tongue, to hold the tongue 8 in the oral cavity, thereby preventing a tongue motion which would otherwise cause an adverse effect on correcting malocclusion (Specification [0034]), which the A-1 invention doesn't give.

Thus, it cannot be said that a person skilled in the art could have easily conceived of causing the "lower end 4" of the planar slip 4" in the A-1 invention projecting to reach a gum inner surface of a lower jaw, as a gradually horizontally bent cross-sectionally curved flange part, to slip beneath the tongue.

The demandant alleges that the lower end 4" of the planar slip 4 in a crosssectional view of FIG. 6, in the A-1 invention, is curved and has slipped beneath the tongue (Written demand p. 2 the description about "E" in Evidence column in the table, p. 17 l. 11-l. 23, Oral proceedings statement brief p. 3 l. 4-l. 5), and that the configuration of the "gradually horizontally bent" is secondary and does not bring a particular effect on correcting anterior cross-bite, on the basis of the description, "to separate the tongue tip 81 from the front tooth part 711 of the lower jaw 7, thereby preventing the front tooth part 711 from being pushed by the tongue tip 81 to push out the lower jaw 7. ... the tongue position correcting flange 5 only needs to prevent the tongue tip 8 from being brought into contact with the lower jaw 7" (Specification [0033]), so that a person skilled in the art could have easily conceived of it (Oral proceedings statement brief p. 4 l. 9-l. 19).

However, Evidence A No. 1 describes, "reference numeral 4 denotes the planar slip formed on an inner rim of the part A of the floor body 1 corresponding to the front tooth part, and is configured to prevent a tongue tip from coming into contact with the gum of a lower jaw by bringing the tongue tip into contact with the slip. The planar slip 4 includes an upper end 4' slightly projecting beyond a top face of the floor body 1 and coming into contact with the inner surface of the front teeth, and a lower end 4" projecting to reach a gum inner surface of a lower jaw" (extracted matter C), and FIG. 5 shows a cross-sectional view of the lower end 4" which is not curved. The lower end 4" in FIG. 6 projecting to reach a gum inner surface of a lower jaw is recognized to be nothing more than being curved along the shape of the gum. Thus, it cannot be recognized that the lower end 4" of the planar slip 4 is curved and has slipped beneath the tongue.

As described above, the tongue position correcting flange in the Invention 1 brings a particular effect by a configuration of slipping the gradually horizontally bent cross-sectionally curved flange part beneath the tongue. The argument alleged by the demandant that the invention could have been easily conceived from Evidence A No. 1 including no description or indication about the configuration has no reasons.

### B Regarding the different feature 2

The Invention 1 has the configuration, "the lower jaw side outer peripheral wall being formed in cross-sectional mound shape, which is laterally thick with respect to a vertically asymmetric base front part having a wide top surface and a narrow lower surface" relating to the Different feature 2. The lower jaw side outer peripheral wall is formed in cross-sectional mound shape which is laterally thick with respect to the base front part, in order to come into contact with a lower lip from the inside and the front tooth part of the lower jaw from the outside. It is as if a non-elastic deformable thick silicone resin is applied at the front of the lower jaw. The lower jaw side outer peripheral wall brings an effect of suppressing or preventing growth of the lower jaw, especially, to project forward (Specification [0028]).

However, the A-1 invention does not have the above configuration. Evidence A No. 1 includes no description or indication about the configuration and effect of the Invention 1.

Thus, it cannot be said that the configuration of the Invention 1 relating to the Different feature 2 could have easily been conceived by a person skilled in the art from the A-1 invention.

#### (3) Summary

As described above, it cannot be accepted that the Invention 1 could have easily been invented by a person skilled in the art on the basis of the A-1 invention.

### 3 Regarding the Inventions 2 to 5

The Inventions 2-5 include all the matters specifying the invention of the Invention 1, as a part of the configuration thereof. It cannot be accepted that the invention could have easily been invented by a person skilled in the art on the basis of the A-1 invention and well-known arts, due to the same reason as that described in the above 2.

#### .No. 6 Closing

As mentioned above, the patent according to the Inventions 1-5 cannot be invalidated due to the reason alleged by the demandant and the submitted means of proof.

The costs in connection with the trial shall be borne by the demandant under the provisions of Article 61 of the Code of Civil Procedure which is applied mutatis mutandis in the provisions of Article 169(2) of the Patent Act.

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

April 12, 2016

Chief administrative judge: NAGAYA, Yojiro Administrative judge: YAMAGUCHI, Naoshi Administrative judge: HIRASE Tomoaki