

Patent Right	Date	March 30, 2022	Court	Intellectual Property High Court, Second Division
	Case number	2021 (Ne) 10049, 2021 (Ne) 10069		
<p>- A case in which, regarding the claim to demand the injunction against the manufacturing and sale, etc. of the product based on the patent right for a patented invention titled "Dart of a blowgun" and the compensation for damages, the court denied both the establishment of literal infringement and infringement under the doctrine of equivalents and reversed the judgment in prior instance that found the establishment of literal infringement and partially upheld the claim.</p>				

Case type: Injunction

Results: Reversal of the prior instance judgment

References: Article 100, paragraphs (1) and (2) of the Patent Act; Article 709 of the Civil Code

Related rights, etc.: Patent No. 4910074

Judgment in prior instance: Tokyo District Court, 2019 (Wa) 2675, rendered on May 18, 2021

### Summary of the Judgment

1. In this case, the Appellee (the "Prior Instance Plaintiff"), who has the patent right (the "Patent Right") for a patented invention titled "Dart of a blowgun," alleged against the Appellant (the "Prior Instance Defendant") that the Defendant's product that is a dart of a blowgun manufactured, etc. by the Appellant (the "Defendant's Product") belongs to the technical scope of an invention indicated in Claim 2 in the claims of the patent (the "Invention"), demanded, based on Article 100, paragraphs (1) and (2) of the Patent Act, the injunction against the manufacturing and sale, etc. of the Defendant's Product and the disposal thereof, and based on Article 709 of the Civil Code, also demanded the payment of compensation for damages (the amount of damages estimated pursuant to Article 102, paragraph (2) of the Patent Act and legal fees) and delay damages.

2. The court of prior instance found the establishment of literal infringement, upheld the Appellee's claim to demand the injunction and disposal, and partially upheld the claim to demand the compensation for damages. Dissatisfied with this judgment, the Appellant filed an appeal and the Appellee filed an incidental appeal, respectively.

3. In this judgment, the court determined that neither literal infringement nor infringement under the doctrine of equivalents are established with respect to the

Defendant's Product on the following grounds as outlined below, rescinded the judgment in prior instance, and dismissed all of the Appellee's claim.

(1) Literal infringement

A. In light of the dictionary meaning, the term "oval form" does not include "egg-shaped form" as its original meaning. In cases of comparing curve lines near both ends of an oval (two points where the oval and its long axis cross), whether the term "oval form" is used as one that includes a form where one of the curve lines has a smaller curvature than the other curve line (hereinafter referred to as a "form with different curvatures") should be determined based on the context, etc. in the description.

B. (A) There is no statement, etc. on the meaning of "oval form" in the description in question (the "Description"). However, in consideration of the fact that "spherical form" and "oval form" are used differently in the invention in Claim 1 in the claims and in the Description, the term "oval form" as used in the Invention does not have a broad meaning that can include a circle.

(B) The problems to be solved by the Invention are understood as follows: problems caused by a "barb" at the tip of a dart with respect to prior art are: [i] when removing a dart from a target, the pin of a round nail alone remained on the target and the film alone was pulled out; and [ii] in cases of an overlapped hit, when pulling out the second dart, the film came off from a round nail pin and the pin of the second dart remained in the film of the first dart; and a problem caused by the misalignment between the head and the cylinder of the tip of a dart and the overlapping of film: [iii] there is a bias towards the center of gravity in an up-and-down direction. The form of a tip for which "the cross-section in the longitudinal direction is an oval form" of the Invention is understood to have been adopted as one of the means to solve the aforementioned problems [i] and [ii] and it may be also understood to be adopted as one of the means to solve the aforementioned problem [iii]; however, from any perspective, it suffices for the form of the tip to be the form of a geometric ellipse and the relevant form does not have to be a form with different curvatures. Rather, in cases of a form with different curvatures, there may be hindrance to solving the aforementioned problems depending on the specific form. In the Description, there is no statement, such as data, etc., that serves as material for judging the range of "oval form" with which the aforementioned problems can be solved appropriately.

(C) The cross-section in the longitudinal direction of the tip in the embodiment of the Invention is a form that should be called "Koban-gata (a form of an oval gold coin)" or "cross-section of Tawara-gata (a form of a bale)" and, although it is different from the form of a geometric ellipse, both ends in the longitudinal direction have the same

curvature. Experiment results concerning said forms are stated in the Description and it is difficult to find circumstances that may cause a hindrance to the solution of the problems mentioned in (B) above.

C. Based on A. and B. above, it is reasonable to understand that the "oval form" of the Invention is a form close to the form of a geometric ellipse or a form close to an oval and includes the form where both ends in the longitudinal direction have the same curvature, but does not include the form with different curvatures. The form of the edge of the pin of the Defendant's Product, which should be described as a form where an edge of the form with different curvatures is cut in the specified range, does not meet the aforementioned requirements.

(2) Infringement under the doctrine of equivalents

A. (A) Concerning the Invention, the characteristic part that composes a unique technical idea, which is not seen in prior art, is understood to be in the point of solving the aforementioned problems by adopting the following composition in a blowgun consisting of a pin and wrapped film: "a pin consisting of a tip, for which the cross-section in the longitudinal direction is an oval form, and a cylinder that extends from that tip in the rear direction," "a film with a tip into which the cylinder of the aforementioned pin is completely inserted, ...," and "the oval-formed part of the pin is connected consecutively to the edge of the film as a weight."

(B) Concerning the form of the tip of the pin, compared with the Invention, it can be said that both are different in that the Defendant's Product [i] has a form where, based on the form with different curvatures, "the front part of the cross section in the longitudinal direction has a curved line form with low curvature and the rear part has the form of a circular arc to form a substantially circular cone" and [ii] a stepped part caused by the difference between the diameter at the base of the tip of the pin and the diameter of the cylinder. Concerning [i] above, based on the point mentioned in (1), B. (B) above, the identification of the form for which the "cross-section in the longitudinal direction is an oval form" of the Invention should be included in the essential part of the Invention and replacement with the form of the Defendant's Product falls under a change of the essential part of an invention and does not meet the first requirement for the doctrine of equivalents.

B. Even based on all articles of the evidence for this case, concerning the replacement of the form for which the "cross-section in the longitudinal direction is an oval form" of the Invention with the form of the Defendant's Product, as stated in (1), B. (B) above, a change to a form with different curvatures may hinder the solution of the problem. While there is no statement in the Description that serves as material for judging the

scope of a change in which the aforementioned problems can be solved appropriately, no common general technical knowledge, etc. is found to say that a person skilled in the art could have easily conceived of the aforementioned replacement at the time of manufacturing, etc. of the Defendant's Product. The third requirement for the doctrine of equivalents is not met either.

C. Consequently, without the need to make determinations on the remaining issues, infringement under the doctrine of equivalents is not found.

Judgment rendered on March 30, 2022

2021(Ne)10049, 2021(Ne)10069, Appeal case of seeking injunction against patent infringement, appeal case incidental thereto (Court of prior instance: Tokyo District Court, 2019(Wa)2675)

Date of conclusion of oral argument: January 26, 2022

#### Judgment

Appellant and incidental Appellee (hereinafter referred to as the "Appellant")

Kabushiki Kaisha Trust Crew

(omitted)

Appellee and incidental Appellant (hereinafter referred to as the "Appellee")

Kabushiki Kaisha Daiseiko

(omitted)

#### Main text

1. The judgment in prior instance is rescinded.
2. All of the Appellee's claims shall be dismissed.
3. The Appeal incidental to this case shall be dismissed.
4. The Appellee shall bear the court costs for both the first instance and second instance.

#### Facts and reasons

The abbreviation of terms and meaning of the abbreviations shall be subject to the judgment in prior instance excluding those defined in this judgment and all uses of the term, "Attachment," in the citation of the judgment in prior instance shall be replaced with "Attachment attached to the judgment in prior instance."

No. 1 Judgment sought by parties

1. Object of the Appellant's appeal

The same as paragraphs 1, 2, and 4 of the main text.

2. Object of the Appellee's incidental appeal

(1) The part of the judgment in prior instance which is against the Appellee shall be rescinded.

(2) The Appellant shall pay to the Appellee 9,693,096 yen and an amount accrued thereon at the rate of 3% per annum for the period from June 25, 2020 until the completion of the payment.

(3) The Appellant shall bear the court costs for both the first instance and second instance.

## No. 2 Outline of the case

### 1. Outline of the case

(1) In this case, the Appellee (the Plaintiff of the prior instance ), who has the patent right (the "Patent Right") for a patented invention titled "Dart of a blowgun," alleged against the Appellant (the Defendant of the prior instance) that the Defendant's product, which is a dart of the blowgun manufactured or otherwise handled by the Appellant (the "Defendant's Product"), belongs to the technical scope of an invention (the "Invention") stated in Claim 2 in the claims of the patent (the "Patent"), demanded, based on Article 100, paragraphs (1) and (2) of the Patent Act , the injunction against the manufacturing and sale, etc. of the Defendant's Product and the disposal thereof (including semi-finished products), and based on Article 709 of the Civil Code, also demanded the payment of 45,653,456 yen (total sum of the amount of damages estimated pursuant to Article 102, paragraph (2) of the Patent Act (41,503,142 yen) and legal fees (4,150,314 yen)) as compensation for damages, and delay damages accrued thereon at the rate of 3% per annum as specified in the Civil Code for the period from June 25, 2020, which is the date of the last tort, until the completion of the payment.

(2) The court of prior instance determined that the Defendant's Product literally fulfills constituent features of the Invention and belongs to the technical scope thereof, and found infringement of the Patent Right. The court of prior instance upheld the Appellee's claims for the injunction and disposal, partially upheld the Appellee's claim for the payment of compensation for damages to the extent of 35,960,360 yen and the payment of delay damages accrued on the aforementioned amount, and dismissed the remaining claims for compensation for damages.

(3) Dissatisfied with the judgment in prior instance, the Appellant filed an appeal and the Appellee filed an incidental appeal, respectively.

2. The basic facts, issues, and allegations of parties related to the issues shall be altered as follows. The supplementary allegations of the parties in this instance as indicated in 3. below are added and additional allegations of the parties in this instance as indicated in 4. below are added respectively. The remaining parts are as indicated in 2. through 4. in "No. 2 Outline of the case" in the "Facts and reasons" section in the judgment in prior instance and therefore they are cited.

(1) After line 7, page 4 of the judgment in prior instance, "are identical to ....", the following is added: "However, the Appellant alleged that the more accurate form of a pin at the tip of the Defendant's Product is as shown in Exhibit Otsu 1. As indicated

below, in the allegation of the infringement under the doctrine of equivalents, the Appellee also alleged based on the dimensions stated in Exhibit Otsu 1." The details of Exhibit Otsu 1 are as shown in the Attachment, Exhibit Otsu 1. In addition, the phrase "low curvature" in line 10, page 4 (Constituent Features b of the Defendant's Product) means "small curvature (low bend)" and, in the same way, the term "low" is used in the sense of "small" curvature in some cases hereinafter in light of the development of the examination, etc.

(2) The phrase "with the Defendant's Product" in line 10, page 8 of the judgment in prior instance is altered to "concerning the Defendant's Product" and the phrase "There are no" in line 22 on the same page is altered to "There was no prior art, such as...." After the phrase "overlapped hit" in line 14, page 9, the following is added: "(meaning that a blown dart enters deeply into the conical film of the preceding dart which has been blown and stuck into the target; hereinafter, in cases of simply referring to "overlap," it refers to the same as above.)" The phrase "a spherical pin (Plaintiff's Product)" in line 3, page 10 is altered to "a spherical pin related to the product that the Appellee manufactures and sells as an embodiment of an invention related to the Patent (hereinafter referred to as the "Plaintiff's Product")." The phrase "with the Defendant's Product" in line 11, page 17 is altered to "concerning the Defendant's Product," and the phrase "Exhibit Otsu No. 9 Publication" in line 10, page 14 is altered to "Exhibit Otsu 9 Publication" respectively. Before the term "composition" in line 20, page 14, the phrase "based on the" is added.

(3) The term "the Invention" in line 10, page 17 of the judgment in prior instance is altered to "an invention related to the Patent"; the phrase "Fukiya Association members" in line 11, page 20 is altered to "members of the Fukiya Association"; the phrase "amount of damages to the Plaintiff" in line 24, page 20 and line 6, page 21 is respectively altered to "damages to the Appellee,"; the phrase "equipment of another group (Plaintiff)" in line 18, page 22 is altered to "the Plaintiff's Product that is manufactured to conform to the standards of another group (the Fukiya Association)"; the phrase "impression of infringement" in line 16, page 23 is altered to "impression that patent infringement was established"; the phrase "to customers other than the Plaintiff and the Defendant" in line 10, page 24 is altered to "by groups other than the Fukiya Association"; and the phrase "Defendant's Association" in line 13 to line 14, page 24 is altered to "Fukiya Association," respectively.

(omitted)

### No. 3 Judgment of this court

1. This court determines as follows: since the Defendant's Product does not fulfill Constituent Features B and D of the Invention, the literal infringement is not established, and since the Defendant's Product does not fulfill the first requirement and the third requirement, the infringement under the doctrine of equivalents is not established. The grounds are as stated below.

#### 2. Outline of the Invention

Except for the additions as follows and the alterations of [FIG. 1] through [FIG. 3], [FIG. 21], and [FIG. 22] from among the drawings attached to the judgment in prior instance as shown in the drawings attached to this judgment, the remaining part of the description of the Invention is as stated in 1. in "No. 3 Judgment of this court" in the "Facts and reasons" section in the judgment in prior instance and therefore they are cited.

(1) The following is added as a new line after the end of line 6, page 26 of the judgment in prior instance.

"The invention related to Claim 1 is a dart that is used for a blowgun, which is developed to achieve the aforementioned purpose. This dart consists of a pin, which consists of a spherical tip and a cylinder extending backward from the tip, wherein the diameter of the cross-section of the cylinder is smaller than the spherical tip's diameter, and a film wrapped in a conical shape with a tip, into which the cylinder of the aforementioned pin is completely inserted and fixed, and wherein the spherical part of the pin is connected consecutively to the tip of the film as a weight.' ([0013])

'Based on the Invention, 1. the tip of the pin is spherical form and there is therefore no barb on the nail head, which makes it easier to remove a dart stuck in the target from the target, thereby preventing as much as possible the situation where the pin alone remains in the target and the film alone is removed. 2. Even if a dart that is blown next overlapped the first dart that has been stuck in the target, stuck deeply in the film of the first dart, thus causing a condition of an overlapped hit, it is possible to prevent the following conditions as much as possible: when the second dart is removed, the film alone is pulled and the pin comes off from the back film and the pin remains in the film of the first dart. 3. The dart can be manufactured with extremely small alignment error of the cylinder to the center of the spherical form and the center of gravity of the overall dart is placed nearer to the front. Therefore, the movement at the rear end of the film in the vertical and horizontal directions during the flight of the dart is decreased and the probability of hitting a target is increased.' ([0014])"

(2) The following is added as a new line after the end of line 17, page 27 of the judgment



in prior instance.

"Here, detailed data on the dart is described. Descriptions of a conventional dart and descriptions of a dart of the embodiment in question (the "Embodiment") are stated below. The conventional dart is a combination of the aforementioned round nail and a substantially rectangular film.

<Descriptions of the conventional dart> The following values with  $\pm$  are the scope of manufacturing tolerances of manual manufacturing.

Overall length: 200mm  $\pm$  5mm

Outer diameter on the side of hands: 13.0mm  $\pm$  0.2mm

Weight: 0.72g  $\pm$  0.02g

Weight of a round nail: 0.250g

Position of the center of gravity: 63mm  $\pm$  2mm from the tip

<Descriptions of the dart of the Embodiment> The following values with  $\pm$  are the scope of manufacturing tolerances of manual manufacturing.

Overall length: 200mm  $\pm$  5mm

Outer diameter on the side of hands: 13.0mm  $\pm$  0.2mm

Weight: 0.80g  $\pm$  0.02g

Weight of a round nail: 0.353g

Position of center gravity: 53mm  $\pm$  2mm from the tip

In a state in which a conventional substantially rectangular film 28 is wrapped in a conical shape, the overlap margin of the rear end part is large as shown in FIG. 22. However, the overlap margin was able to be decreased as mentioned above by adopting the aforementioned film form. Therefore, the center of gravity of the film in the vertical direction can be made uniform and the movement of the dart during flight is decreased and the weight of the dart can be decreased.

The weight of the pin is increased by 0.1g from a conventional round nail 26 by adopting a round pin 4 in the Embodiment; however, the weight of the film was decreased and the weight of the overall dart increased only by 0.08g.

In addition, in the Embodiment, the pin was changed from a conventional round nail to the one with a spherical tip and thereby, the position of the center of gravity in the longitudinal direction of the dart was moved to the tip direction of the dart. This change further decreased movement during the flight of the dart and increased the probability of hitting a target.' ([0046] through [0051])"

(3) The following is added as a new line after the end of line 2, page 28 of the judgment in prior instance.

"Example of modification of the Embodiment is explained.' ([0064])"

(4) The following is added as a new line after the end of line 13, page 28 of the judgment in prior instance.

"'Descriptions of the dart in the example of modification are stated below.' ([0067])"

(5) The part from the beginning of line 14, page 29 to the end of line 1, page 30 of the judgment in prior instance is altered as follows.

"According to the description, etc. in (1) above, an object where a plastic film is wrapped conically and a round nail is fixed at the tip was used as a dart of a conventional blowgun. Since the head of the round nail of the dart has a 'barb,' there are the following problems: [i] when removing a dart from a target, the pin of the round nail alone remained in the target and the film alone was pulled out; [ii] in cases of an overlapped hit, the 'barb' on the head of the round nail of the second dart stuck in the film of the first dart, and when pulling out the second dart, the film came off the round nail pin and the pin of the second dart remained in the film of the first dart; in addition, since the cylinder of a commercially available round nail does not always go through the center of the head and if a substantially rectangular plastic film, which is disclosed as a prior art, is wrapped conically, the overlap margin at the rear end of the film in the wrapped state increased; and there is, therefore, the problem that [iii] the center of gravity in the vertical direction is not uniform in this structure. By adopting the structure of the Invention, [i] since the cross-section in the longitudinal direction of the tip of the pin is an oval form, when removing a dart stuck in the target, the dart can be removed easily and it can prevent the condition as much as possible that the pin alone remains in the target and the film alone is pulled out; [ii] even in cases of an overlapped hit, it can prevent the following condition as much as possible that when the second dart is pulled out, the film alone is pulled, the pin is removed from the film at the back, and the pin remains in the film of the first dart; and [iii] the dart can be manufactured with an extremely small alignment error of the cylinder extending to the back from the tip to the center of the oval form, and the center of gravity of the overall dart is placed nearer to the front, and therefore, movement in the vertical direction at the rear end of the film during the flight of the dart is decreased and the probability of hitting a target is increased. The effects of the Invention are as follows: when removing a dart from a target, both pin and film can be pulled out together; it becomes possible to obtain a dart where the second pin is difficult to stick into the film of the first dart even in cases of an overlapped hit; a dart with an extremely small alignment error of the cylinder to the center of the oval form can be manufactured; and it becomes possible to obtain a dart where the center of gravity in the vertical direction is uniform, the center of gravity in the longitudinal direction of the overall dart is placed nearer to the front, and where

movement during flight is small and the probability of hitting a target is high."

3. Issue 1-1 (Whether a pin of the Defendant's Product has a tip for which the cross-section in the longitudinal direction is an "oval form" (Constituent Features B and D))

(1) General meaning of an "oval form"

A. The term "oval form" means an "oval-shaped form" and "oval" refers to "one of conic curves (quadratic curves); In geometric terms, the trajectory of point P where the total of the distances from two fixed points (F, F') on a flat surface (FP + F'P) is constant" ("Kojien Dictionary, the 6th edition" (issued on January 11, 2008, Iwanami Shoten) p. 1705, see Exhibit Otsu 2). In this regard, according to the evidence related to the search results on the website "Kotobank" that was submitted by the Appellee (Exhibit Ko 2; printed on May 30, 2019), the term "oval form" is explained as "an oval-shaped form or a similar form thereto" (explanation of Digital Daijiten Dictionary), and "an oval-like form or in such a form; Koban-gata (the form of an oval gold coin); Choenkei (ellipse-shape); Sokuenkei (oval-shaped form used in Japanese mathematics)" (explanation of Nihon Kokugo Daijiten Dictionary, Selected Version).

Based on the above, generally, an "oval form" refers to an "oval-shaped form"; it includes the form of a geometric ellipse, and it is understood that it is a term also used for a form which is different from said form, but similar thereto.

However, as to what shape is included in the "oval form" as a form that is different from a geometric ellipse, but similar thereto, it cannot be said that the extension of meaning of the "oval form" is clear based on the aforementioned dictionary meaning.

B. Concerning the above, "Tamago-gata (egg-shaped form)" means "an oval form similar to a chicken egg" (the aforementioned "Kojien Dictionary, the 6th edition," p. 1756; see Exhibit Ko 78). In addition, according to the evidence related to search results on the website "Kotobank" that was submitted by the Appellee (Exhibit Ko 77; printed on July 29, 2021), the term "Tamago-gata (egg-shaped form)" is defined as "an oval form like a chicken egg and shapes similar thereto; A form that looks like an egg" (explanation of Nihon Kokugo Daijiten Dictionary, Selected Version) and "an oval form similar to a chicken egg; A form that looks like an egg; 'Rankei (an egg-shape)'" (explanation of Digital Daijiten Dictionary).

In addition, "Rankei (an egg-shape)" means "a form that looks like an egg; 'Tamago-gata (egg-shaped form)'" (the aforementioned "Kojien Dictionary, the 6th edition," p. 2933). In the evidence (Exhibit Ko 77), "Rankei (an egg-shape)" is defined as "a form that looks like an egg; an oval form with one end that is slightly thinner; 'Tamago-gata (egg-shaped form)'" (explanation of Nihon Kokugo Daijiten Dictionary, Selected Version) and "a form that looks like an egg; 'Tamago-gata (egg-shaped form)'"

(explanation of Digital Daijiten Dictionary).

The term "oval form" is used as a term including "Rankei (an egg-shape)" in some cases, but on the other hand, regarding "oval form" as defined in A. above, there is no explanation to the effect that it is synonymous with "Rankei (an egg-shape)," as well as an explanation of "Rankei (an egg-shape)" even as an example; as mentioned above, regarding "Rankei (an egg-shape)," there is also no statement to the effect that it is synonymous with "oval form" without restriction, meanwhile, the term "oval form" is used with restrictions on "an oval form similar to a chicken egg" and "an oval form like a chicken egg" and it is explained as "an oval form with one end that is slightly thinner." In light of these facts, it seems that "an oval form" does not include "Rankei (an egg-shape)" as its original meaning.

C. Based on the above, the term "oval form" refers to a geometric ellipse and a form similar thereto. When comparing curves near both ends (meaning two points where the ellipse and the major axis cross) of the oval, the determination as to whether the term "oval form" is used as the one including a form where a curvature of one end is smaller than the curvature of the other end (such as "Rankei (an egg-shape)," etc.; "A shape where the end in the longitudinal direction has a lower curvature than the other end" as alleged by the parties; hereinafter referred to as the "form with different curvatures") needs to be made based on the context, etc. where the term "oval form" is used in the descriptions (including drawings).

D. Meanwhile, the Appellee alleged that the term "oval form" includes "Rankei (an egg-shape)," etc. and indicated image search results on the Internet (Exhibits Ko 10-1 through 10-6) and examples of use of the term on websites, etc. (Exhibits Ko 79 through 84). However, they only show circumstances for what forms the term "oval form" is generally used and it is not understood to show that the term "oval form" naturally includes various forms indicated in the articles of evidence mentioned above as its meaning.

(2) The term "oval form" in the descriptions in question (the "Description")

A. There is no statement, etc. explaining the meaning of "oval form" in the Description.

However, in consideration of the fact that the tip is described as a "spherical form" in the invention related to Claim 1 and that "spherical form" and "oval form" are used differently also in the Description, it is understood that the term "oval form" as used in the Invention does not at least include a circle (cross-section of a spherical form) and does not have a broad meaning that can include a circle.

B. (A) In consideration of 1. (2) of No. 3 "Judgment of this court" in the "Facts and reasons" section in the judgment in prior instance that is altered and then cited, the

problems to be solved by the Invention are understood as the following problems caused by a "barb" at the tip of a dart with respect to prior art: [i] when removing a dart from a target, the pin of the round nail alone remained in the target and the film alone was pulled out; and [ii] in cases of an overlapped hit, when pulling out the second dart, the film came off from the round nail pin and the pin of the second dart remained in the film of the first dart (hereinafter collectively referred to as the "problem of the remaining pin"); and the problem caused by the misalignment between the head of the tip and the cylinder of a dart and the overlapping of film, [iii] there was a bias towards the center of gravity in a vertical direction (hereinafter referred to as the "problem of the center of gravity").

(B) In light of the fact that the cause of the problem of the remaining pin was considered to be the presence of a "barb" at the tip, the tip form with a "cross-section in the longitudinal direction that is an oval form" is understood to be adopted as one of the means for solving the problem of the remaining pin. From the perspective of eliminating the "barb," the tip form is sufficient with a geometric ellipse, but it does not have to be a form with different curvatures. Consequently, the circumstances where the pin form is one of the means for solving the problem of the remaining pin do not fall under positive circumstances where the term "oval form" in the Invention should include the form with different curvatures. Instead, if the tip is in the form with different curvatures, depending on the specific form, there is another possibility that the tip in the form with different curvatures may remain in the target or in the film of the first dart in cases of an overlapped hit, and it may hinder the solution of the problem of the remaining pin. In this regard, in the Description, there is no statement, such as data concerning the tip form, etc., that serves as material for judging the range of the "oval form" with which the problem of the remaining pin can be solved appropriately.

On the other hand, according to the Description, the relationship between the solution of the problem of the center of gravity and the tip form with a "cross-section in the longitudinal direction that is an oval form" is not clear; however, as one of the causes of the problem of the center of gravity, misalignment between the head of the tip and the cylinder of a dart is indicated; although it is about an embodiment related to the invention related to Claim 1 concerning the effects, etc. of the Invention, there is the statement that "the pin was changed from the conventional round nail to the one with a spherical tip and, thereby, the position of the center of gravity in the longitudinal direction of the dart was moved to the tip direction of the dart"; and it is stated that the example of modification is related to the Invention and there is a specific statement concerning the weight, etc. of the round pin in comparison with the conventional round

nail of a dart in the same way as the aforementioned embodiment. In consideration of the above, it may also be understood that the tip form with a "cross-section in the longitudinal direction that is an oval form" was adopted as one of the means for solving the problem of the center of gravity from the perspective that the relevant form can easily solve the misalignment with the cylinder, and that the tip is relatively heavier because there is no bias towards the center of gravity in the vertical direction and it has a tip extended longer towards the back than a conventional round nail. However, even from these perspectives, it suffices for the tip form to be the form of a geometric ellipse, and the relevant form does not have to be a form with different curvatures. Rather, if the tip is in the form with different curvatures, depending on the specific form, it may become difficult to adjust the position with the cylinder or its characteristics, such as no bias towards the center of gravity in the vertical direction and the tip becoming relatively heavier, may not be fulfilled. Therefore, it may hinder the solution of the problem of the center of gravity. In this regard, in the Description, there is no statement, such as data concerning the tip form, etc., that serves as material for judging the range of the "oval form" with which the problem of the center of gravity can be solved appropriately.

C. Examples of embodiment of the Invention are stated in [0065] through [0069] and [FIG. 3] of the Description. The cross-section of the tip in the longitudinal direction is a form where a circle, which is a cross-section in the longitudinal direction of the "spherical form" that is the tip form of the embodiment of the invention related to Claim 1 ([FIG. 2] of the Description), is divided into two pieces to the right and left (or front and back in the moving direction of the dart) and a rectangle is pinched in between (in other words, a form where "a circle" is extended to the right and left). The cross-section should be called "Koban-gata (the form of an oval gold coin)" or "a cross-section of Tawara-gata (a barrel-shaped form)," etc. and although it is different from the form of a geometric ellipse, both ends in the longitudinal direction have the same curvature. Concerning the aforementioned form, the experiment results are stated in the Description. As pointed out in B. (B) above, the circumstances where it may hinder solution of the problem of the remaining pin and the problem of the center of gravity are difficult to find.

(3) Meaning of the term "oval form" as used in Constituent Features B and D and whether literal infringement is established

A. Based on the points found in (1) and (2) above, it is reasonable to understand that the "oval form" as used in Constituent Features B and D refers to a form close to the form of a geometric ellipse or a form close to an oval and includes the form where both

ends in the longitudinal direction have the same curvature, such as the form defined in the embodiment of the Invention, but it does not include forms with different curvatures. There is no evidence to find common general technical knowledge that is different from the above.

B. The tip of the pin of the Defendant's Product is "a tip that is in a form where the front part of the cross section in the longitudinal direction has a curved line form with a low curvature and the rear part has the form of a circular arc to form a substantially circular cone, the contact part with the cylinder at the back has corners at the top and bottom, and the corners at the back are connected with a straight line" (Constituent Feature b) and in a form where an end of the form with different curvatures is cut in the pre-determined scope. Therefore, it is not included in the "oval form" as defined in Constituent Features B and D.

Consequently, it cannot be found literally that the Defendant's Product belongs to the technical scope of the Invention.

C. The Appellee alleged that the tip of the pin in a form with different curvatures fulfills the following technical meanings of the Invention and therefore it is included in the "oval form" of Constituent Features B and D: [i] since it has no "barb," a dart can be easily removed; [ii] the center of gravity in the vertical direction is uniform; and [iii] it is heavier as a weight than the nail-shaped tip, which is a prior art, and the center of gravity in the longitudinal direction of the overall dart is placed nearer to the front. However, in light of the points found and explained in (1) and (2) above, it cannot be determined that the tip of the pin in the form with different curvatures is included in the "oval form" immediately based on the fact that [i] through [iii] above are fulfilled (in addition, according to the allegation of the Appellee, the "spherical form" related to the invention related to Claim 1 can be included in the "oval form" related to the Invention at the same time and it is also difficult to determine that the allegation is reasonable from this perspective).

In addition, the Appellee alleged that the issue in this case is not the form that is generally visualized first for an oval form, but whether a form where the end in the longitudinal direction has a lower curvature than the other end, such as "Rankei (an egg-shape)" and "teardrop form," etc., is expressed as an "oval form." However, prior to the decision as to whether the form of the tip of the Defendant's Product is included in the "oval form" as defined in Constituent Features B and D of the Invention, the meaning of the "oval form" defined in Constituent Features B and D becomes an issue of interpretation of the constituent features of the Invention first. Therefore, the aforementioned allegation of the Appellee has an error in its assumption and it does not

have an impact on the determination mentioned in A. and B. above.

4. Issue 1-2 (whether the infringement under the doctrine of equivalents is established)

(1) The first requirement

A. The essential part of a patented invention should be interpreted to be the part of the claims of the patented invention that describes the characteristic feature embodying a unique technical idea that has not been observed in prior art.

The aforementioned essential part should be determined by identifying the problem and solution means of the patented invention and its effects based on the statements in the claims and the description and then by determining the characteristic features embodying a unique technical idea that has not been observed in prior art out of the statements in the claims and the description of the patented invention. In other words, based on the fact that the essential value of the patented invention can be determined depending on the degree of its contribution compared with prior art in the technology field of the patented invention, the essential part of a patented invention should be determined based on what is stated in the claims and the description, and, in particular, through a comparison with prior art stated in the description. [i] If the degree of contribution of the patented invention is considered to be higher than that of prior art, the patented invention should be found to be embodying a generic concept representing some of the statements in the claims, and [ii] if the degree of contribution of the patented invention is evaluated as not much higher than that of prior art, the patented invention should be found to be almost exactly the same as what is stated in the claims.

However, in the case where the description states a problem that has remained unsolved by prior art, if such statement is objectively found to be insufficient in light of prior art as of the application filing date or the date of priority claim, the patented invention's characteristic feature embodying a unique technical idea that has not been observed in prior art should be determined also in consideration of prior art that is not stated in the description. In such case, the essential part of the patented invention would be more precisely embodying what is stated in the claims, which would limit the applicability of the doctrine of equivalents, than in a case where the essential part of the patented invention could be determined based only on what is stated in the claims and the description. (2015 (Ne) 10014, the judgment of the Special Division of the Intellectual Property High Court on March 25, 2016))

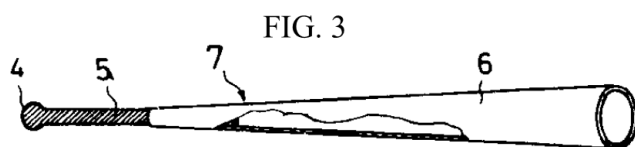
B. (A) The problem and solution means of the Invention and its effects are as indicated in 1. (2) and 3. (2) B. above, "No. 3 Judgment of this court" in the "Facts and reasons" section in the judgment of this court that are altered and then cited.

(B) Prior art



a. Matters stated in Exhibit Otsu 4 Publication

Exhibit Otsu 4 Publication is related to an application for utility model registration for a device disclosed in 1982 and titled "Athletic safe blowgun." [i] In the part of the claims for utility model registration, there is a statement that "a blowgun that is equipped with a round-nosed metal dart head at the tip and hollow and conical feathers ... formed with paper or synthetic resin and metallic foil alone or in combination at the back of the dart head integrally." (line 5 through line 9, page 1 of the description of Exhibit Otsu 4 Publication) [ii] In the detailed explanation of the device, there is a statement that "a blowgun (7) that is formed in the overall length of approximately 10 cm by engaging and affixing hollow and conical feathers (6) ... formed by expanding gradually with paper or synthetic resin and metal foil alone or in combination at the back of a metal dart axis (5) that has a round-nosed dart head (4) so that the tip is harmless." (line 10 through line 16, page 2 of the description of Exhibit Otsu 4 Publication) [iii] The following FIG. 3 is posted as an enlarged side view of the blowgun (part of it is cut off).



b. Matters indicated in Exhibit Otsu 5 Publication

Exhibit Otsu 5 Publication is related to an application for utility model registration for a device disclosed on September 14, 1983 and titled "Structure of a blowgun" and Exhibit Otsu 5 Publication has the following statement.

(a) Claims for utility model registration

"The structure of a blowgun characterized by setting the position of the center of gravity of the blowgun dart anterior to the one-third point of the overall length thereof from the tip of the dart head in an athletic safe blowgun in which a metal dart head is installed at the tip and feathers made of light materials are installed at the back of the dart head." (line 5 through line 9, page 1 of the description of Exhibit Otsu 5 Publication)

(b) Detailed explanation of the device

<i> "This device is related to the improvement of the darts of an athletic safe blowgun for competing in terms of the probability of hitting a target and, in particular, it relates to the structure of a blowgun with a stable flying position and flying trajectory." (line 11 through line 13, page 1 of the description of Exhibit Otsu 5 Publication)

<ii> "Then, the creator of the device produced blowguns with various structures for

trial and tested them to find out the optimal structure of the blowgun. As a result, as stated below, the creator confirmed that in an athletic safe blowgun that has a metal dart head at the tip and feathers made of light materials at the back of the dart head, by setting the position of the center of gravity of the blowgun dart anterior to the one-third point of the overall length thereof from the tip of the dart head, the flying position of the blowgun dart becomes stable and that the flying distance consequently increased the most." (line 19, page 1 through line 7, page 2 of the description of Exhibit Otsu 5 Publication)

<iii> "In FIG. 1, a blowgun dart (1) consists of a dart head (2) at the head and feathers (3) at the tail. The tip (5) of the feathers (3) is inserted into a rear engagement hole (4) of the dart head (2) and fixed by adhesive. The dart head (2) has a thick tip (6) and back (7) and the intermediate part constitutes a small-diameter neck (8). The blowgun dart hitting the target is stuck in the target by the small-diameter part (8) and does not easily come off. Therefore, the hit position can be easily checked with the blowgun dart being stuck in the target." (line 14, page 2 through line 3, page 3 of the description of Exhibit Otsu 5 Publication)

<iv> "By adding mass to the dart head (2) and lightening the feathers (3), the position of the center of gravity (G) of the overall blowgun dart (1) is set to the front. In particular, it is preferable to position the center of gravity (G) in the part (19) at a distance within one-third of the overall length "l" of the blowgun dart from the tip surface (10) of the dart head (2)." (line 7 through line 11, page 3 of the description of Exhibit Otsu 5 Publication)

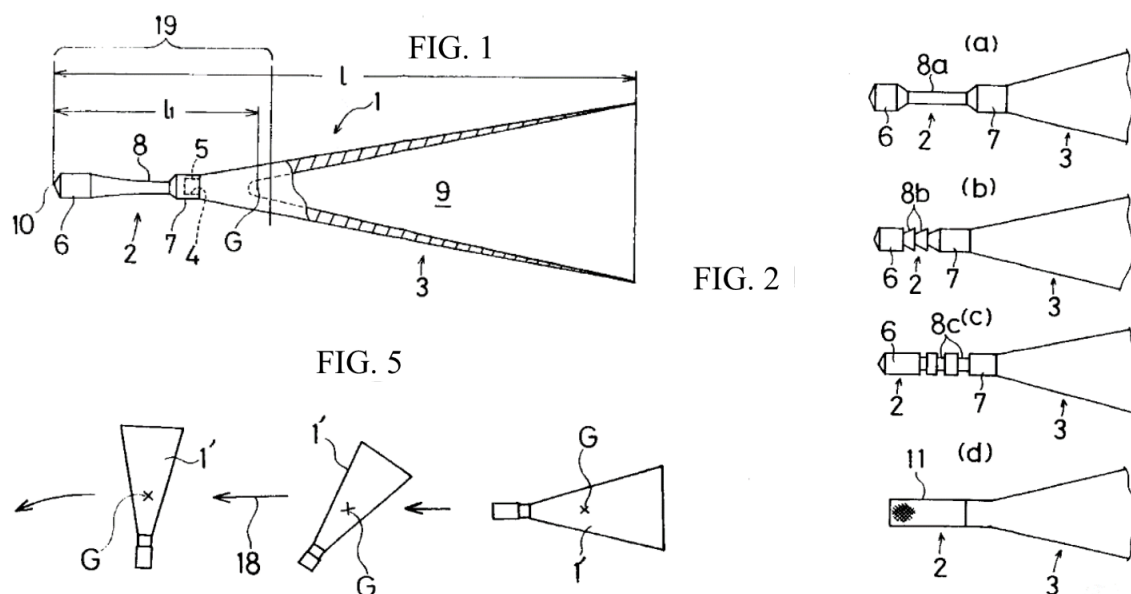
<v> "Various modifications of dart heads are shown in FIG. 2. In FIG. 2, (a) is a dart head with a neck (8a) that is processed in the form of a right circular cylinder; (b) is a dart head in which a neck (8b) is formed in one or multiple truncated cone shapes; and (c) is a dart head on which multiple small-width necks (8c) are installed. In addition, in order to prevent the dart head from coming off, not only a neck is formed on a dart head (2), but also, as shown in (d) in FIG. 2, the dart head (2) may be formed in a right circular cylinder shape and the surface roughening may be provided to its outer peripheral surface (11)." (the second line from the bottom, page 3 through line 6, page 4 of the description of Exhibit Otsu 5 Publication)

<vi> "If the center of gravity (G) is in the rear within one-third of the overall length, as shown in FIG. 5, a blowgun dart (1)' that flies in the direction shown with the arrowed line (18) against the resistance of air tends to fly with the center of gravity (G) in front, and therefore, the direction is reversed, as shown in the figure, and the blowgun dart cannot fly at distance due to increased air resistance." (line 4 through line 9, page 5 of

the description of Exhibit Otsu 5 Publication)

<vii> "This device is highly excellent when being applied to an athletic blowgun...since the direction of a dart is not reversed due to the air resistance during flight and the dart maintains the normal position and keeps flying, the flying distance increases due to less air resistance and the dart can fly in a straight direction." (line 10 through line 19, page 5 of the description of Exhibit Otsu 5 Publication)

(c) Figures



c. Matters stated in Exhibit Otsu 6 Publication

Exhibit Otsu 6 Publication is related to an application for a patent disclosed on July 30, 1999 and titled "Compressed air blowgun" and Exhibit Otsu 6 Publication has the following statements.

(a) Detailed explanation of the invention

<i> "[Technology field of the invention] This invention is related to an expiratory compressor that holds a pre-determined expiration temporarily to increase pressure, a projectile dart that docks tightly with the expiratory compressor, and an injection case or automatic dart feeder that assists with the docking, in a blowgun device that shoots a projectile dart, by pressure of expiration." (Paragraph [0001] of Exhibit Otsu 6 Publication)

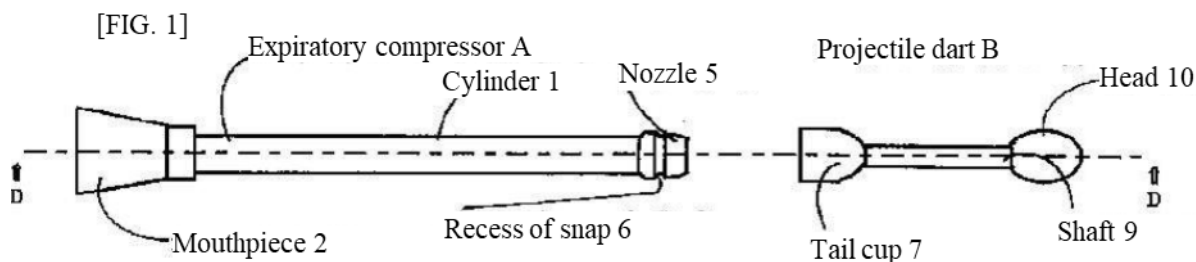
<ii> "Due to the historical origin that blowguns were originally for fighting and hunting and, later, for shooting games, there was the problem that it may cause injury, and property damage since the dart heads were sharp and hard, etc." ([0004] of Exhibit Otsu 6 Publication; it is a statement related to [Problems to be solved by the invention].)

<iii> "A component for docking the projectile dart that docks with the expiratory compressor mentioned in the preceding paragraph 0007 is a hemispherical tail cup. The head also forms a similar spherical form. Therefore, if a dart collides with a human body or other things, it is not likely to damage them." ([0008] of Exhibit Otsu 6 Publication; it is a statement related to [Means for solving problems].)

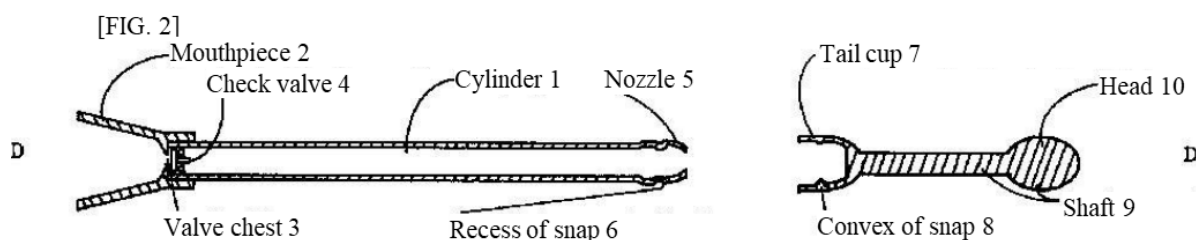
<iv> "[Embodiment examples] Explaining embodiment examples in reference to figures, in FIG. 1 and FIG. 2, ... a projectile dart B consists of three parts, including a tail cup 7 and a head 10, and a shaft 9 that connects them. Both the tail cup 7 and the head 10 are molded in a long spherical form where the length of the axis in the flying direction is longer than the orthogonal axis or a slightly flat and short spherical form in which the long and short axes are opposite. ... The projectile dart B can be made by integrally molding the tail cup 7, the shaft 9, and the head 10 with plastic. However, the center of gravity must be placed to the flying direction by filling the inside of the head 10, while making the tail cup 7 hollow. ..." ([0017] of Exhibit Otsu 6 Publication)

(b) Figures

<i> FIG. 1



<ii> FIG. 2



d. Matters stated in Exhibit Otsu 7 Publication

Exhibit Otsu 7 Publication is related to an application for a patent disclosed on May 12, 2000 and titled "Blowgun" and Exhibit Otsu 7 Publication has the following statements.

(a) Detailed explanation of the invention

<i> "[Prior art] There are projectiles for which the tip of the dart head is modified into a blunt form to the extent of being safe so that it does not injure human beings and

animals. On the other hand, there are feathers modified by using new light and thin materials, such as synthetic resin, etc. so as to receive expiration effectively." (Paragraph [0002] of Exhibit Otsu 7 Publication)

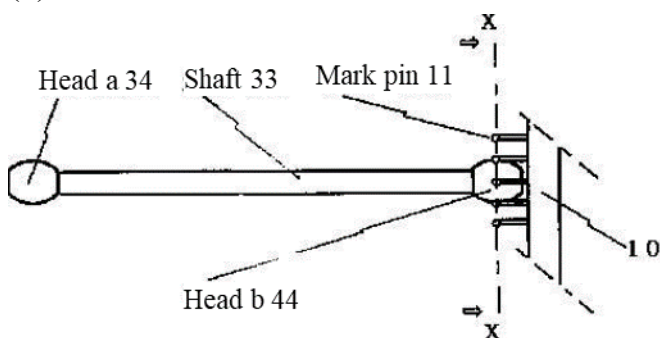
<ii> "[Problems to be solved by the invention] Due to the historical origin that blowguns were originally weapons or hunting tools and, later, they became shooting game devices, there was the problem that the danger of the dart head due to its original character of being sharp and hard, etc. had not been removed." ([0005] of Exhibit Otsu 7 Publication)

<iii> "[Means for solving problems] To eliminate the fixed idea that a dart head must be made of wood or bamboo, animal bones, stone ware, copper ware, iron ware, or other strong and sharp materials, to replace both the dart head and feathers of a projectile dart, with a soft head, and thereby pursuing full safety not only substantively but also instinctively." ([0008] of Exhibit Otsu 7 Publication)

<iv> "[Embodiment examples] Embodiment examples are explained in reference to drawings. ... First, in FIG. 1, a shaft 33 of a projectile dart D is a round bar made of recycled paper, wood and bamboo, or plastic with a length of 7 cm and a diameter of 4 mm. Both cut edges of the shaft 33 are bonded with the cylinder or long spherical form head a34 and head b44 with a long diameter of 10 mm and a short diameter of 7 mm that are made of rubber, polyethylene, or other soft materials. ..." ([0016] of Exhibit Otsu 7 Publication)

<v> "By replacing both dart head and feathers of a projectile dart with a bald soft head, it can achieve the condition where the blowgun dart will not injure athletes, audience or things and also instinctively achieve sufficient safety." ([0021] of Exhibit Otsu 7 Publication; it is a statement related to [Effects of the invention].)

(b) FIG. 1



e. Matters stated in Exhibit Otsu 8-1

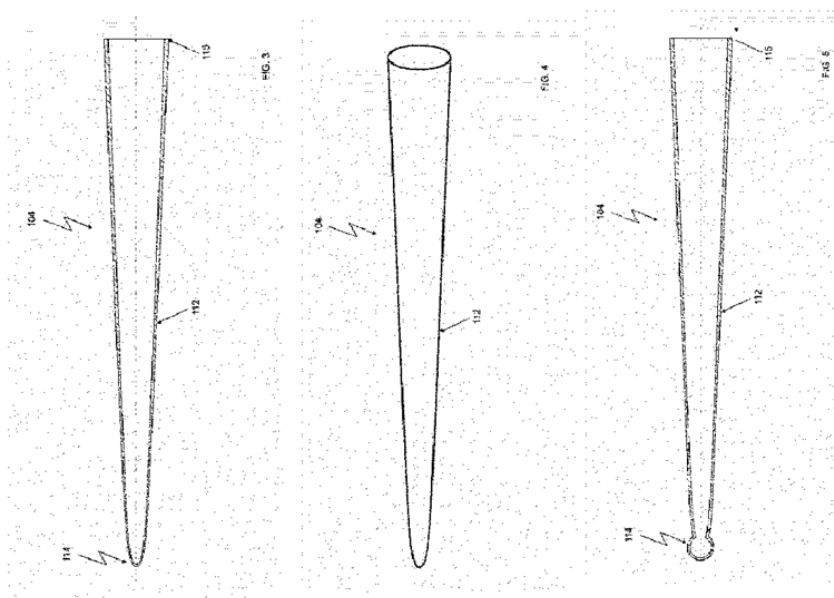
Exhibit Otsu 8-1 is a US patent application publication (US2011/0187053A1) for an invention disclosed on August 4, 2011 and titled "Toy blow gun, a projectile, a target and a set including same" and Exhibit Otsu 8-1 has the following statements.

"[0046] With reference to FIG. 3 and FIG. 4, in which a non-limiting embodiment of the projectile 104 is depicted. The projectile 104 comprises a projectile body 112. ... The projectile body 112 is generally of a conical shape as shown in the figure. The projectile body 112 comprises an apical end 114 and a rear end 115. The apical end 114 is generally blunt, but its exact shape is not particularly limited. One variation is depicted in FIG. 5, which depicts a first variation of a blunt end, which includes a round enlarged terminus point. Irrespective of which variation for the apical end 114 is selected, the selection may be made from among those that allow penetration of the target 106, as will be described in greater detail herein below. However, ... further contributes to making the overall use of the toy kit 100 safer."

[FIG. 3]

[FIG. 4]

[FIG. 5]



f. Matters stated in Exhibit Otsu 9 Publication

Exhibit Otsu 9 Publication is a US patent publication for an invention patented on May 6, 1986 and titled "Toy blow gun" and the Exhibit Otsu 9 Publication has the following statements.

(a) Outline of the invention

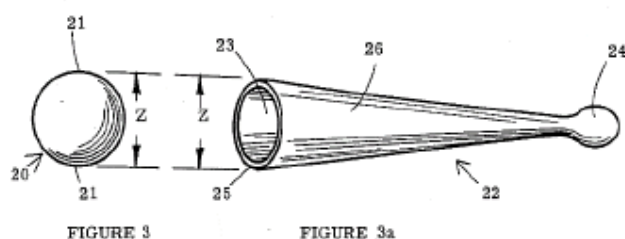
"... a spherical projectile 20 with a diameter of Z is shown in FIG. 3 ..." (line 5 through line 6, paragraph 4 of Exhibit Otsu 9 Publication)

"A preferred projectile for use in the invention comprises a hollow tubular projectile having a closed end and an open end forming a closed end cavity within the projectile, with the projectile being adapted to be inserted within the bore by blowing air through the blow tube and into the open end of the projectile." (line 15 through line 20, paragraph 4 of Exhibit Otsu 9 Publication)

The shape of the projectile is preferably substantially conical and the closed end of the projectile is blunt. Most preferably the blunt closed end of the projectile is substantially spherical in shape." (line 21 through line 24, paragraph 4 of Exhibit Otsu 9 Publication)

"Most preferably the aforementioned hollow tubular projectile further has a blunt closed end for safety purposes. As depicted in FIG. 3a, the blunt closed end 24 is chosen to be substantially spherical in shape. The primary concern in devising the blunt closed end 24 of the projectile 22 is safety." (line 52 through line 57, paragraph 4 of Exhibit Otsu 9 Publication)

(b) FIG. 3



g. Matters stated in Exhibit Otsu 11 Catalog

In Exhibit Otsu 11 Catalog, which was published in July 2008, a photograph of a dart of a blowgun (Exhibit Otsu 11 Blowgun) with the structure indicated in the Description [FIG. 20] is posted. (Exhibits Otsu 11 through 13, the entire import of oral arguments)

h. Matters stated in Exhibit Otsu 57 Publication

Exhibit Otsu 57 Publication is "Registered Utility Model" issued on January 11, 2007 and for a device titled "Nail-removing tool" and Exhibit Otsu 57 Publication has the following statements.

(a) Detailed explanation of the device

<i> Background art

"When blowing out a dart from the cylinder of an athletic blowgun, the user breathes by strongly adding abdominal pressure instantaneously and it increases blood circulation. Therefore, the athletic blowgun is considered to be effective for maintaining and improving fitness. It has become widespread as a sport recently and athletic blowgun competitions have been held. (See Patent Document 1.)

A dart of this type of blowgun is formed by wrapping strip sheet materials to form approximately 200 mm of a conical cylinder, which has an opening at the tapered tip, inserting a nail from the opening to have the round head of the nail exposed at the

tapered tip, and adhering the body to the tip with an adhesive. The cylinder, from which a dart is ejected, is made of a pipe with a diameter of approximately 13 mm and a length of approximately 500 mm to 1,200 mm." ([0002] and [0003] of Exhibit Otsu 57)

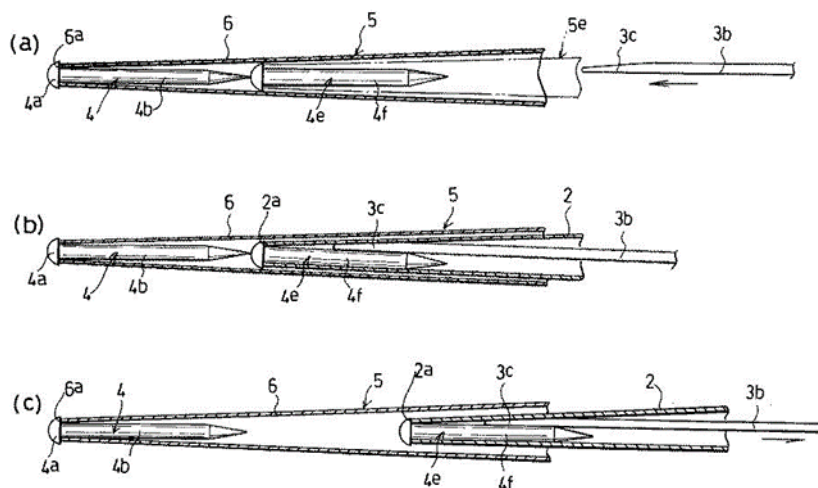
<ii> Problems to be solved by the device

"With an athletic blowgun, there are cases where the dart that is blown next overlaps the first dart that is stuck in the target during practice. Since the dart has speed, the nail of the second dart strongly connects to the inside of the first dart. In this case, if the second dart is pulled out, the nail of the second dart often remains inside the first dart. In order to remove the nail that remains in the first dart, the only way is to massage it while holding the first dart and it is very inconvenient." ([0004] of Exhibit Otsu 57 Publication)

<iii> Embodiment examples

"FIG. 1 is an exploded front view of a nail-removing tool related to the present device; FIG. 2 (a) is a front view indicating the use conditions of the nail-removing tool in FIG. 1; FIG.2 (b) is an enlarged sectional view of A-A line in FIG. 2 (a); and FIG. 3 (a), (b), and (c) are enlarged sectional views of the dart tip in order to explain the use conditions of the nail-removing tool in FIG. 1. ([0009] of Exhibit Otsu 57 Publication)

(b) FIG. 3



(C) According to prior art as described in (B) above, concerning the dart of a blowgun, it was found to be well-known fact before filing an application for the Patent that, mainly from the perspective of safety, it is preferable that the tip of the dart is a "round-nosed form," "spherical form," "long spherical form," etc. and that the flight stability and flight distance of the dart are increased by setting the position of the center of gravity of the dart nearer to the front of the overall dart.

However, concerning a blowgun dart comprised of a round nail or pin and wrapped



film, the presence of prior art indicating the specific application of the aforementioned well-known matters is not found even based on all articles of evidence of this case.

(D) In addition to Constituent Features A through E of the Invention, based on (A) through (C) above, the characteristic part of the Invention that composes a unique technical idea, which is not observed in prior art, is understood to be in the point of solving the problem of the remaining pin and the problem of the center of gravity by adopting the following composition in a blowgun dart consisting of a pin and wrapped film: in particular, from among Constituent Features B through D, "a pin consisting of a tip, for which the cross-section in the longitudinal direction is an oval form, and a cylinder extending backward from the tip," "a film with a tip into which the cylinder of the aforementioned pin is completely inserted, ...," and "the oval-formed part of the pin is connected consecutively to the tip of the film as a weight."

(E) According to the meaning of "oval form" as defined in Constituent Features B and D that was found and determined in 3. above and the entire import of oral arguments, concerning the form of the tip of the Invention and the form of the tip of the Defendant's Product, they are different in the following points: [i] the tip is an "oval form" in the Invention, while the tip of the pin of the Defendant's Product is in "a form where the front part of the cross section in the longitudinal direction has a curved line form with a low curvature and the rear part has the form of a circular arc to form a substantially circular cone" (as indicated in Attachment Exhibit Otsu 1, the pre-determined curvature is chosen for a circular arc in the rear part that forms a substantially circular cone; see Exhibit Otsu 3-1 and 3-2 and Exhibit Otsu 15), and [ii] the Defendant's Product has a stepped part at the base.

Concerning [i] from among the above, based on what is pointed out in 3. (2), B. above, the Invention is understood to have adopted the structure of "a tip, for which the cross-section in the longitudinal direction is an oval form" at least as a method of solving the problem of the remaining pin. In addition, as pointed out in 3. (2) B. (B) above, if the form of a tip "for which the cross-section in the longitudinal direction is an oval form" is changed to a form with different curvatures, solution of the problem of the remaining pin and the problem of the center of gravity may be hindered; however, the data, etc. that serves as the material for judging the range of "oval forms" that can appropriately solve the problem of the remaining pin is not stated in the Description.

Then, the specification of the form of the tip in the Invention, "for which the cross-section in the longitudinal direction is an oval form," as found and determined in 3. (3) above should be included in the essential part of the Invention. Replacing the form with the form of the tip of the Defendant's Product should be considered to fall under a

change of the essential part of the Invention.

C. Consequently, the structure of the Invention contains a part different from that of the Defendant's Product. The different part is the essential part of the Invention and therefore, the first requirement is not fulfilled.

(2) The third requirement

In addition, even based on all the articles of evidence for this case, concerning the replacement of the form "for which the cross-section in the longitudinal direction is an oval form" of the Invention with the form of the tip of the Defendant's Product, as stated in 3. (2), B. (B) above, a change to a form with different curvatures may hinder the solution of the problem of the remaining pin and the problem of the center of gravity. While there is no statement in the Description that serves as material for judging the scope of change in which the aforementioned problems can be solved appropriately, no common general technical knowledge, etc. is found to consider that a person skilled in the art could have easily conceived of the aforementioned replacement at the time of manufacturing, etc. of the Defendant's Product.

Consequently, the third requirement is not fulfilled.

(3) Conclusion

Consequently, without the need to make determinations on the remaining issues, infringement under the doctrine of equivalents is not found.

(4) Allegation of the Appellee

A. (A) The Appellee alleged concerning the first requirement that the following points are the essential part of the Invention: there is no "barb" part, and the dart has a tip with a smooth and curve-shaped cross-section form in the longitudinal direction which makes it possible to pull out the dart easily from the target and from the first dart, and a pin with a form where the cylinder passes through the substantial center of the tip. However, as determined and explained in (1) A. and B. above, the Appellee's aforementioned allegation cannot be adopted. Therefore, the Appellee's allegation related to the common features and differences between the Invention and the Defendant's Product based on the aforementioned allegation cannot be adopted.

(B) The Appellee alleged concerning the first requirement that the point that the Invention focuses on the form of the rear part of the tip of the pin is new as a technical idea. However, even if the point of focus has one of the characteristics of the Invention, the circumstances where the form of the tip, "for which the cross-section in the longitudinal direction is an oval form," was selected as a method of solving problems in the Invention cannot be ignored when examining the establishment of infringement under the doctrine of equivalents. In addition, the structure related to the form of the

rear part of the tip of the pin merely remains as one of the solutions for multiple problems to be solved by the Invention. Therefore, the Appellee's aforementioned allegation does not have an impact on the determination mentioned in (1) B. and C. above.

B. The Appellee alleged concerning the third requirement that the Invention provides the tip of the pin which makes it possible to pull out a dart from the target and from the first dart, and that a person skilled in the art could have easily conceived of the fact that the form of the tip of the pin is not limited to the spherical form or oval form, but it only requires to have no "barb" and to be formed with a smooth curve so that resistance becomes less when pulling out the dart. As mentioned in A. (A) above, the Appellee's allegation concerning the essential part of the Invention cannot be adopted, and the Appellee's aforementioned allegation that a person skilled in the art could have easily conceived of that fact lacks the premise, and the third requirement is not fulfilled, as mentioned in (2) above. The remaining allegations of the Appellee are also based on the Appellee's allegation concerning the essential part of the Invention or ignoring the circumstances where the form of the tip, "for which the cross-section in the longitudinal direction is an oval form," was selected as a method of solving the problems in the Invention. Therefore, they are not reasonable and cannot be adopted.

#### No. 4 Conclusion

Consequently, without the need to make determinations on the remaining issues, there are no grounds for the Appellee's claims against the Appellant. However, in contrast to this determination, the judgment in prior instance partially upheld the claims of the Appellee and it is not reasonable. The Appellant's appeal in this case has grounds. Therefore, the judgment in prior instance shall be rescinded and the Appellee's claims in question shall be dismissed. Since there are no grounds for the incidental appeal in question, it shall be dismissed and the judgment is rendered as indicated in the main text.

Intellectual Property High Court, Second Division

Presiding judge: HONDA Tomonari

Judge: NAKAJIMA Tomohiro

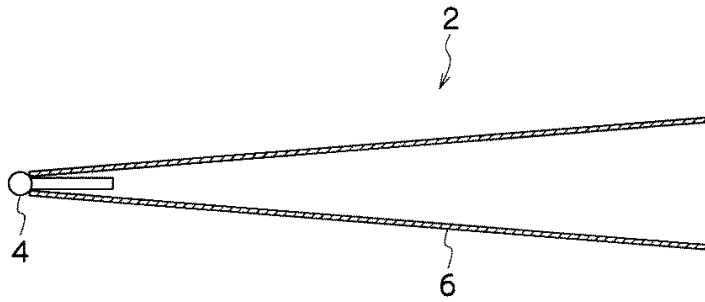
Judge: KATSUMATA Kumiko

(Attachment) Exhibit Otsu 1

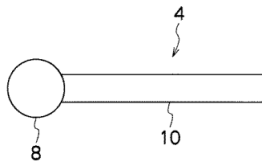
(Attachment)

Figures

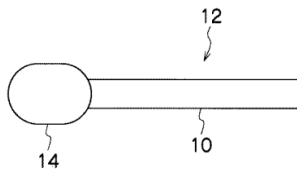
[FIG. 1]



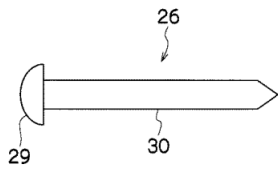
[FIG. 2]



[FIG. 3]



[FIG. 21]



[FIG. 22]

