Patent Right	Date	February 28, 2020	Court	Intellectual Property High Court, Special Division
	Case number	2019(Ne) 10003		

- The "product that could have been sold if there had been no infringement" prescribed in Article 102, paragraph (1) of the Patent Act only needs to be a product of the patentee whose sales quantity is affected by the infringement; that is, a product of the patentee having a competitive relationship with the infringement product in the market.
- The "amount of profit per unit" prescribed in Article 102, paragraph (1) of the Patent Act is an amount of marginal profit obtained by deducting the cost additionally required in direct relation with the manufacture/sales of the aforementioned product for the patentee from the sales of the product of the patentee, and its burden of allegation/proof resides on the side of the patentee.
- A case in which, in calculation of the damage by the patent right infringement pursuant to Article 102, paragraph (1) of the Patent Act, under the held circumstances in which [i] the patent invention is an invention characterized by shapes of inner peripheral surfaces of a bearing member and a rotary body of a beauty instrument constituted by members such as the rotary body, a support shaft, the bearing member, a handle, and the like; [ii] the product of the patentee which worked the patent invention is a beauty instrument for picking up the skin and giving an esthetic action to the skin by pressing a pair of rolling portions rotatably supported by the support shaft to the skin and by rotating them, and the aforementioned feature portions are part of the product; [iii] a portion having a great attraction for customers in the product is the structure of the rolling portion, and the feature portion of the patent invention cannot be considered to contribute to all the profit by sales of the product by the patentee; even if the feature portion of the patent invention is only a part thereof in the product of the patentee which worked the patent invention, it is actually presumed that the total amount of the marginal profit obtained by the sales of the product of the patentee is the lost profit of the patentee. However, by comprehensively considering the circumstances such as positioning of the feature portion in the patentee's product, features provided in the patentee's product other than the feature portion and the attraction for the customer thereof and the like, the actual presumption should be overturned by approximately 60%, and this should be deducted from the marginal profit
- The "ability to work" prescribed in Article 102, paragraph (1) of the Patent Act only needs to be a potential ability, and it should be considered that the ability to work exists if the number of products corresponding to the sales quantity of the infringement product can be supplied by a method of production subcontracting or the like, and the burden of allegation/proof resides on the patentee side.
- The "circumstances due to which the patentee would have been unable to sell" prescribed in the proviso to Article 102, paragraph (1) of the Patent Act refer to circumstances which hinder considerable causal relations between the infringement and the sales decrease of the product of the patentee, and circumstances such as [i] presence of a difference in the business forms, prices, and the like between the patentee and the infringer (non-identicality of the market); [ii] presence of competitive products in the market; [iii] sales efforts (brand strength, advertisement) of the infringer; and [iv] presence of differences in performances of the infringement

product and the product of the patentee (features other than the patent invention such as functions, designs, and the like) should fall under them, and the burden of allegation/proof of the aforementioned circumstances and the quantity corresponding to the circumstances resides on the infringer side.

Case type: Compensation

Result: Modification of the prior instance judgment

References: Article 102, paragraph (1) of the Patent Act, Article 709 of the Civil Code

Related rights, etc.: Patent No. 5356625, Patent No. 5847904

Summary of the Judgment

1. Outline of the case

(1) This case is a case in which Plaintiff of the first instance having Present Patent Right 1 (registration number: Patent No. 5356625) and Present Patent Right 2 (Patent No. 5847904) of the invention titled "BEAUTY INSTRUMENT" alleges that sales and the like by Defendant of the first instance of Defendant's product (9 types of beauty instruments including a beauty instrument named "Germa-mirror ball beauty roller shine") infringe each of the aforementioned Patent Rights, and made claims for injunction thereof, disposal, and payment of damages of 500,000,000 yen (partial claim) under Article 102, paragraph (1) of the Patent Act from Defendant of the first instance.

(2) Issues of this case are as follows.

A. Whether Defendant's product belongs to the technical scope of Present Invention 1.

B. Whether Present Patent 1 should be invalidated through a trial for patent invalidation.

C. Whether Defendant's product belongs to the technical scope of Present Invention 2.

D. Whether Present Patent 2 should be invalidated through a trial for patent invalidation.

E. Amount of damages of Plaintiff of the first instance

(3) The court of prior instance judged that sales and the like of Defendant's product infringe Present Patent Right 2 and affirmed injunction of sales and the like and disposal of Defendant's products and a part of payment of the claim for compensation for damage.

In calculation of the amount of damages under Article 102, paragraph (1) of the Patent Act, the court of prior instance deducted 50% as the circumstances in the proviso of the paragraph from the amount obtained by multiplying the number

transferred of Defendant's product by the amount of profit per unit from Plaintiff's product and moreover, made 90% of reduction in the amount by considering the degree of contribution.

(4) Both Plaintiff of the first instance and Defendant of the first instance appealed against the judgment of the court of prior instance. It is to be noted that, Plaintiff of the first instance expanded the amount of compensation for damage from 300,000,000 yen to 500,000,000 yen in the appeal.

2. Outline of the judgment

The judgment affirmed injunction of sales and the like and disposal of Defendant's product, since Defendant's product does not belong to the technical scope of Present Invention 1 and thus, the sales and the like thereof do not infringe Present Patent Right 1 but infringe Present Patent Right 2, found that the amount of damages under Article 102, paragraph (1) of the Patent Act by the infringement of Present Patent Right 2 to be 440,060,000 yen, and modified the judgment of the court of prior instance on the amount of damages.

The outline of the judgment on damage theory of the judgment is as follows.

(1) Article 102, paragraph (1) of the Patent Act is the provision prescribing the calculation method of the amount of damage when compensation for lost profits by a decrease in sales quantity is claimed under Article 709 of the Civil Code, and in the main text of Article 102, paragraph (1) of the Patent Act, it is provided that the amount calculated by multiplying the number of articles transferred by the infringer by amount of profit per unit from the products that the patentee or exclusive licensee (hereinafter, referred to as the "patentee or the like") could have sold if there had been no infringement, may be fixed as the amount of the damage that the patentee or the like has incurred, within the limits of an amount proportionate to the ability of the patentee or the like to work the patented invention, and in the proviso thereto, it is provided that if the circumstances due to which the patentee or the like would have been unable to sell a number of products equivalent to all or part of number transferred are proved by the infringer, an amount proportionate to the number of products that could not have been sold due to such circumstances is to be deducted for the purpose of more flexible finding of a decrease in the sales quantity by promoting a shift to the burden of proof of the decrease in the number sold having a considerable causal relations with the infringement.

(2) Amount of profit per unit from the product that could have been sold if there had been no infringement

A. Product that could have been sold if there had been no infringement

The "product that could have been sold if there had been no infringement" only needs to be a product of the patentee or the like influenced in sales quantity by the infringement; that is, a product of the patentee or the like having a competitive relationship in the market with the infringement product. Since Plaintiff's product is the worked product of Present Invention 2, it obviously falls under the "product that could have been sold if there had been no infringement".

B. Amount of profit per unit

(a) The "amount of profit per unit" prescribed in Article 102, paragraph (1) of the Patent Act is the amount of marginal profit obtained by deducting the cost additionally required in direct relation with the manufacture/sales thereof for the patentee or the like by the manufacture/sales of the product from the sales of the product of the patentee or the like, and its burden of allegation/proof should be interpreted to reside on the side of the patentee.

Defendant of the first instance alleges that all the costs of Plaintiff of the first instance should be deducted from the sales of Plaintiff's product in accordance with the sales ratio of Plaintiff's product to all the products of Plaintiff of the first instance.

However, Article 102, paragraph (1) of the Patent Act is the provision prescribing the calculation method of the amount of damage when compensation for lost profits by a decrease in sales quantity is claimed under Article 709 of the Civil Code, and the amount calculated by multiplying the number of articles transferred by the infringer by amount of profit per unit from the products that the patentee or the like could have sold if there had been no infringement is fixed as the aforementioned amount of damage. As described above, the amount of damage in the paragraph is the lost profits for the product of the patentee or the like that the patentee or the like could have sold if there had been no infringement and thus, in calculation of the "amount of profits per unit" in the paragraph, it is not reasonable to deduct the costs not in direct relation with the manufacture/sales of the product of the patentee or the like from the sales, and a labor cost of a management division, communication and transportation expenses, and the like usually fall under that. Moreover, Plaintiff of the first instance had already manufactured/sold Plaintiff's product, and it is not reasonable, either to deduct costs required for that and having been already paid (costs required for and having been already paid for equipment and facilities required for manufacturing the product, for example) from the sales.

(b) Present Invention 2 is the invention of a beauty instrument constituted by members such as the rotary body, the support shaft, the bearing member, the handle,

and the like, and the invention is characterized by the shapes of the inner peripheral surfaces of the bearing member and the rotary body (hereinafter, this portion is referred to as the "present feature portion"). Since Plaintiff's product is a beauty instrument which is to give an esthetic action to the skin by pressing the pair of rolling portions rotatably supported by the support shaft to the skin and rotating it so as to pick up the skin, the present feature portion is only a part of Plaintiff's product.

In the product of the patentee or the like which worked the patent invention, even if the feature portion of the patent invention is only a part thereof, it is actually presumed that the total amount of the marginal profit obtained by sales of the product of the patentee is the lost profit of the patentee or the like.

For Plaintiff's product, realizing favorable rotation of the rolling portion is also important, and it can be considered that the present feature portion which is a member required for that; that is, the shapes of the inner peripheral surfaces of the bearing member and the rotary body, also contribute to the profit by sales of Plaintiff's product correspondingly.

However, Plaintiff's product is a beauty instrument which gives an esthetic action by pressing the pair of rolling portions to the skin and rotating it so as to pick up the skin and thus, the portion having a great attraction for customers in Plaintiff's product is found to be the structure of the rolling portion, and Plaintiff's product includes a solar panel so as to generate a microcurrent, whereby the attraction for customers is found to be enhanced. From these circumstances, it cannot be considered that the present feature portion contributes to all the profits by the sales of Plaintiff's product and thus, it is not reasonable to find that the total amount of the marginal profit obtained by sales of Plaintiff's product is the lost profit of Plaintiff and thus, the aforementioned actual presumption should be partially overturned in Plaintiff's product.

By comprehensively considering the circumstances appearing in this case such as the positioning of the aforementioned present feature portion in Plaintiff's product, features provided in Plaintiff's product other than the present feature portion and the attraction for the customer thereof, it is reasonable to admit that a degree of the overturning is approximately 60% of the total.

As described above, in calculation of the "amount of profit per unit" from Plaintiff's product, it is reasonable to deduct approximately 60% from 5,546 yen which is the amount of the marginal profit of the entire Plaintiff's product, and the amount of the profit per unit from Plaintiff's product is 2,218 yen (5,546 yen × 0.4 ≈ 2,218 yen).

(3) Amount proportionate to ability to work

A. The "ability to work" in Article 102, paragraph (1) of the Patent Act only needs

to be a potential ability, and it should be interpreted that the ability to work exists even in the case where the number of products corresponding to the sales quantity of the infringement product can be supplied by a method of production subcontracting or the like, and the burden of allegation/proof resides on the patentee side.

B. Since it can be presumed that Plaintiff of the first instance has the ability to supply extra products of approximately 30,000 units to the average sales quantity per month, it is reasonable to find that Plaintiff of the first instance had the ability to additionally sell Plaintiff's product in the quantity of approximately 20,000 units on a monthly average within this extra product supply ability.

Therefore, it is found that Plaintiff of the first instance had the ability to sell Plaintiff's product in the quantity of Defendant's product sold by Defendant of the first instance.

(4) Circumstances due to which sales could have been impossible

A. The proviso to Article 102, paragraph (1) of the Patent Act provides that if there are circumstances due to which the patentee would have been unable to sell a number of products equivalent to all or part of number transferred of the infringement product (hereinafter, referred to as the "circumstances due to which sales would have been impossible"), the amount according to a number equivalent to the circumstances due to which the sales would have been unable shall be deducted, and if the infringer alleges/proves the circumstances found to be the circumstances due to which sales would have been impossible and an amount according to the number proportionate to the circumstances, the amount according to the number of products is deducted from the amount of damage found by the main text of the paragraph.

The "circumstances due to which sales would have been impossible" refer to circumstances hindering the considerable causal relations between the infringement and the sales decrease of the product of the patentee or the like, and circumstances such as [i] presence of a difference in the business forms, prices, and the like between the patentee and the infringer (non-identicality of the market); [ii] presence of competitive products in the market; [iii] sales efforts (brand strength, advertisement) of the infringer; and [iv] presence of differences in performances of the infringed product and the product of the patentee (features other than the patent invention such as functions, designs, and the like) should fall under them.

B. Defendant of the first instance alleges as the circumstances due to which sales would have been impossible [i] a difference in prices and a difference in vendors between Plaintiff's product and Defendant's product; [ii] presence of a large number of competitive products; [iii] the manufacturing cost for the bearing in Defendant's product

is only a small part of the total manufacturing cost; [iv] the bearing portion cannot be recognized from an appearance and that there is an alternative art; [v] Plaintiff's product has a mechanism for generating microcurrent but Defendant's product does not have such a mechanism; and [vi] sales efforts of Defendant of the first instance. With regard to the aforementioned [i], in view that Plaintiff's product is a relatively expensive beauty instrument, while Defendant's product is sold at an inexpensive price at approximately one-eighth to one-fifth of the price of Plaintiff's product, it cannot be necessarily considered that those who purchased Defendant's product would have purchased Plaintiff's product if there had not been Defendant's product. Therefore, the difference in the sales price can be found as the circumstances due to which sales would have been impossible, but the difference in the sales form cannot be found as the circumstances due to which sales would have been impossible. With regard to [ii], in the market, it is not enough to find that products in a competitive relation with Plaintiff's product were sold during the present infringement period (December 4, 2015 to May 8, 2017) on the evidence and thus, this point cannot be found to be the circumstances due to which sales would have been impossible. With regard to [iii], it has been already considered in calculation of the amount of profit per unit from Plaintiff's product and thus, it is not necessary to repeatedly consider this as the circumstances due to which sales would have been impossible. With regard to [iv], it is applicable to both Defendant's product and Plaintiff's product and thus, it cannot be considered that in the case where there is no Defendant's product, the demand for Defendant's product does not go toward Plaintiff's product due to presence of the circumstances and thus, these circumstances cannot be found to be the circumstances due to which sales would have been impossible. With regard to [v], the circumstances mean that Defendant's product is poor in attraction for customers in relation to Plaintiff's product and thus, it cannot be circumstances which defer the demand to go toward Plaintiff's product if there is no Defendant's product. Therefore, it cannot be found to be the circumstances due to which sales would have been impossible. With regard to [vi], on the evidence, it is not found that Defendant of the first instance made sales efforts at such a degree that is enough to be found as the circumstances due to which sales would have been impossible.

With regard to the aforementioned [i], in view that the price difference between Plaintiff's product and Defendant's product is not small, the quantity corresponding to the circumstances due to which sales would have been impossible by presence of the circumstances is found not to be small. On the other hand, both products are beauty instruments, and in view of the characteristic of a product as a beauty instrument, it should be presumed that some of the consumers do not put emphasis on the price and

would purchase an inexpensive product, if any, but if there is no inexpensive product, not a small number of the consumers would purchase an expensive product. Moreover, Plaintiff's product has the surface of the roller applied with platinum coating, and a solar panel is mounted so as to generate microcurrent and thus, the quality should be higher than Defendant's product without such equipment and thus, even though Plaintiff's product has the sales price of approximately 24,000 yen, it can take in a certain number of the consumers of Defendant's product at the sales price of approximately 3,000 to 5,000 yen. As described above, it cannot be found that the quantity corresponding to the circumstances due to which sales would have been impossible because of the presence of the price difference between Plaintiff's product and Defendant's product mounts to a considerable quantity. By considering such circumstances, it is reasonable to find that the quantity corresponding to the circumstances due to which sales would have been impossible is approximately 50% of the total.

(5) Whether amount of damage should be decreased by considering contribution degree of Present Invention 2

Even if the allegation of Defendant of the first instance has a point that the amount of damage should be decreased by considering the rate of contribution of Present Invention 2 to the sales of Defendant's product separately from these deductions, there are no provisions approving it, or there are no grounds for approving it, either, and thus, such decrease by considering the contribution degree shall not be approved.

(6) Amount of damage

The amount of damage of Plaintiff of the first instance under Article 102, paragraph (1) of the Patent Act is 390,060,000 yen (2,218 yen × 351,724 units × 0.5 ≈ 390,060,000 yen) by deducting the portion of the circumstances that approximately 50% of the number transferred of 351,724 units of Defendant's product could not have been sold and by multiplying the sales quantity after the deduction by the profit amount of 2,218 yen per unit of Plaintiff's product.

It is reasonable that lawyer's fees having a considerable causal relation with the infringement of Present Patent Right 2 by Defendant of the first instance are found to be 50,000,000 yen by considering the approved amount, a difficulty degree of this lawsuit, and that the injunction claim by Plaintiff of the first instance are approved.

Therefore, the amount of damage of Plaintiff of the first instance is 440,060,000 yen in total.

Judgment rendered on February 28, 2020
2019 (Ne) 10003 Appeal case of seeking injunction against patent infringement (Court of Prior Instance: Osaka District Court, 2016 (Wa) 5345)
Date of conclusion of oral argument: January 24, 2020

Judgment

Appellant and Appellee: MTG CO., LTD. (hereinafter, referred to as "Plaintiff of first instance")
Counsel attorney: SEKI Kenichi
Patent attorney as counsel: KOBAYASHI Tokuo

Appellee and Appellant: FIVE STARS INC. (hereinafter, referred to as "Defendant of first instance")
Counsel attorney: FUKE Megumi
The same: NISHIMURA Kei
Patent attorney as an assistant in court: TAKAYAMA Yoshinari

Main text

1. The judgment in prior instance shall be modified as follows on the basis of the appeal and amendment of claim by Plaintiff of first instance.
   (1) Defendant of first instance must not transfer or offer to transfer the beauty instrument described in the lists of Defendant's Products 1 to 9 attached to the judgment in prior instance.
   (2) Defendant of first instance must dispose of the beauty instrument described in the lists of Defendant's Products 1 to 9 attached to the judgment in prior instance.
   (3) Defendant of first instance must pay to Plaintiff of first instance money of 440,060,000 yen and the rate of 5% per annum for 38,100,000 yen from June 15, 2016, for 4,050,000 yen from August 26, 2017, for 257,850,000 yen from November 17 of the same year, and for 140,060,000 yen from May 15, 2019 until completion of each of the payments.
   (4) The remaining claims by Plaintiff of the first instance shall be dismissed.
2. The appeal by Defendant of first instance shall be dismissed.
3. The court costs shall be divided by 20 throughout the first instance and the

second instance, one part of them shall be borne by Plaintiff of first instance, and the remaining by Defendant of first instance.

4. This judgment can be provisionally executed only for the first clause (1), (2), and (3).

Facts and reasons

No. 1 Gist of the appeal

1. Plaintiff of first instance

(1) The judgment in prior instance shall be modified as follows:

(2) Defendant of first instance must not transfer or offer to transfer the beauty instrument described in the lists of Defendant's Products 1 to 9 attached to the judgment in prior instance.

(3) Defendant of first instance must dispose of the beauty instrument described in the lists of Defendant's Products 1 to 9 attached to the judgment in prior instance.

(4) Defendant of first instance must pay to Plaintiff of first instance money of 500,000,000 yen and the rate of 5% per annum for 38,100,000 yen from June 15, 2016, for 4,050,000 yen from August 26, 2017, for 257,850,000 yen from November 17 of the same year, and for 200,000,000 yen from May 15, 2019 until completion of each of the payments.

(Plaintiff of first instance withdrew the lawsuit seeking injunction of manufacture, use, lease, export, and offer of lease of the beauty instrument and expanded the claim for damages of 300,000,000 yen as above in this court).

2. Defendant of first instance

(1) The part that Defendant of first instance lost in the judgment in prior instance shall be reversed.

(2) The claim by Plaintiff of first instance related to the reversed part shall be dismissed.

No. 2 Outline of the case

1. Outline of lawsuit

(1) This case is a case in which Plaintiff of first instance holding each of the patent rights in 2(2) described below of the invention titled "BEAUTY INSTRUMENT" alleged to Defendant of first instance that manufacture, use, transfer, lease, export, or offer of transfer or lease by Defendant of first instance of the beauty instrument described in the "lists of Defendant's Products" 1 to 9 attached to the judgment in prior instance (hereinafter, each referred to as

"Defendant's Product 1" and the like and collectively referred to as "Defendant's Products") infringe each of the patent rights, and [i] made claims for injunction of manufacture/sales and the like of Defendant's Products by each of the patent rights and for disposal on the basis of Article 100, paragraph (1) and paragraph (2) of the Patent Act; and [ii] made a claim for payment of damages of 300,000,000 yen by infringement of the patent rights in 2(2)B below under Article 102, paragraph (1) of the Patent Act and the delay damages at the rate of 5% per annum prescribed in the Civil Code for 38,100,000 yen from June 15, 2016 (the day following the date of delivery of the bill), for 4,050,000 yen from August 26, 2017 (the day following the date of delivery of the written motion of amendment of claim as of August 15, 2017), and for 257,850,000 yen from November 17 of the same year (the day following the date of delivery of the written motion of amendment of claim (2) as of November 13, 2017) until completion of each of the payments on the basis of Article 709 of the Civil Code as a partial claim.

(2) The court of prior instance judged that the manufacture, sales, and the like of Defendant's Products infringe the patent right in 2(2)B below, and then affirmed the claim by Plaintiff of the first instance with the limit of requesting injunction of the manufacture, sales, and the like and disposal of Defendant's Products and payment of damages of 107,350,651 yen and delay damages at the rate of 5% per annum for 38,100,000 yen from June 15, 2016, for 4,050,000 yen from August 26, 2017, and for 65,200,651 yen from November 17 of the same year until completion of each of the payments, and dismissed the remaining claims.

(3) Both Plaintiff of the first instance and Defendant of the first instance appealed against the judgment in prior instance.

Moreover, Plaintiff of first instance withdrew the suit seeking injunction of manufacture, use, lease, export, and offer of lease of Defendant's Products, made a claim for damages by infringement of the patent rights in 2(2)A below, and expanded the claim and made a claim for 500,000,000 yen and the delay damages at the rate of 5% per annum prescribed in the Civil Code for 38,100,000 yen from June 15, 2016, for 4,050,000 yen from August 26, 2017, for 257,850,000 yen from November 17 of the same year, and for 200,000,000 yen from May 15, 2019 (the day following the date of delivery of the written motion of amendment of claim as of May 14, 2019) until completion of each of the payments as a partial claim in this court.

2. Basic Facts (facts not disputable between the parties or found by the evidences described later, and the entire import of the oral argument)

(1) Parties

Plaintiff of the first instance is a stock company doing businesses of planning, development, manufacture, sales, and the like of healthcare appliances, beauty instruments, medical appliances, and quasi drugs.

Defendant of the first instance is a stock company doing businesses of sales, import/export, and the like of healthcare appliances, beauty instruments, and the like.

(2) Patent rights held by Plaintiff of the first instance (Exhibits Ko 1 to 4)

Plaintiff of the first instance has the patent rights according to the patents of the following A and B (hereinafter, each of the patents is referred to as "Present Patent 1", "Present Patent 2", and the invention according to Present Patent 1 as "Present Invention 1", the patent right according to Present Invention 1 as "Present Patent Right 1", the invention according to Claim 1 of Present Patent 2 as "Present Invention 2", the patent right according to Present Invention 2 as "Present Patent Right 2", and the description and the drawings according to Present Patent 1 and Present Patent 2 as "Present Description 1" and "Present Description 2", respectively. See Patent Gazette attached to the judgment in prior instance).

A. Present Patent 1

Registration number: Patent No. 5356625

Title of the invention: BEAUTY INSTRUMENT

Date of filing: June 20, 2013

(original date of filing: November 16, 2011)

Application No.: Patent Application No. 2013-129765

Date of registration: September 6, 2013

B. Present Patent 2

Registration number: Patent No. 5847904

Title of the invention: BEAUTY INSTRUMENT

Date of filing: September 26, 2014

(original date of filing: November 16, 2011)

Application No.: Patent Application No. 2014-197056

Date of registration: December 4, 2015

(3) Situation of trial for invalidation related to Present Patents 1 and 2 (Exhibits Ko 14, 37, 46, 53, Exhibits Otsu 153 and 165, entire import of oral argument)

With regard to the trial for invalidation (Invalidation Trial No. 2016-800086)

according to Present Patent 1 claimed by Defendant of the first instance, the Japan Patent Office approved correction of the Scope of Claims and the Description and made a trial decision that the claim was not established on October 24, 2017. With regard to the lawsuit seeking rescission of the JPO decision (2017 (Gyo-ke) 10201 case, hereinafter, referred to as the "Other Lawsuit 1"), the Intellectual Property High Court rendered the judgment that the claim shall be dismissed on September 4, 2018, and since the judgment was finalized, the JPO decision was also finalized.

With regard to the trial for invalidation (Invalidation Trial No. 2017-800074) according to Present Patent 2 claimed by Defendant of the first instance, the Japan Patent Office made a trial decision that the claim was not established on March 29 of the same year, and with regard to the suit against the JPO decision (2018 (Gyo-ke) 10048, hereinafter, referred to as "Other Lawsuit 2"), the Intellectual Property High Court dismissed the claim on February 6, 2019.

(4) Scope of Claims

A. The description in the Scope of Claims in Present Patent 1 is as follows:

A beauty instrument in which a pair of balls is supported on a distal end portion of a handle at an interval from each other and rotatably around one axis, respectively, characterized in that the axis of the ball is constituted to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle with respect to a skin surface during a reciprocating operation, an opening angle of a pair of ball support shafts is set to 65 to 80 degrees, and an interval between outer peripheral surfaces of the pair of balls is set to 10 to 13 mm, the ball is supported by the ball support shaft through a bearing member in a non-penetrating state, and constituted such that the skin is picked up by pressing the outer peripheral surface of the ball to the skin and moving it from the distal end of the handle toward a base end direction.

B. The description in Claim 1 of the Scope of Claims of Present Patent 2 is as follows.

A beauty instrument including a support shaft retained by/fixed to a handle at a base end and a rotary body rotatably supported on the distal end side of the support shaft and configured to give an esthetic action to the body by the rotary body, characterized in that the rotary body has a hole only on the base end side; the rotary body is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof; the bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole in the rotary body; a lock claw capable of elastic

deformation protrudes from the bearing member and the bearing member has a flange portion on the base end side of the lock claw; the lock claw has a slanted surface whose distance to a rotation center of the rotary body in the bearing member becomes smaller as it gets closer to the distal end side; the rotary body has a stepped portion capable of being engaged with the lock claw on an inner periphery; and the stepped portion is locked on the base end side of the lock claw and is located between the lock claw and the flange portion.

(5) Separate description of constituent features

A. Separate description of constituent features of Present Invention 1

The constituent features of Present Invention 1 are separately described as follows:

A. A beauty instrument in which a pair of balls is supported on a distal end portion of a handle at an interval from each other and rotatably around one axis, respectively.

B. The axis of the ball is constituted to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle with respect to a skin surface during a reciprocating operation.

C. An opening angle of a pair of ball support shafts is set to 65 to 80 degrees.

D. An interval between outer peripheral surfaces of the pair of balls is set to 10 to 13 mm.

X. The ball is supported by the ball support shaft through a bearing member in a non-penetrating state.

E. It is constituted such that the skin is picked up by pressing the outer peripheral surface of the ball to the skin and moving it from the distal end of the handle toward a base end direction.

B. Separate description of constituent features of Present Invention 2

The constituent features of Present Invention 2 are separately described as follows:

F. A beauty instrument including a support shaft retained by/fixed to a handle at a base end and a rotary body rotatably supported on the distal end side of the support shaft and configured to give an esthetic action to the body by the rotary body.

G. The rotary body has a hole only on the base end side, and the rotary body is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof.

H. The bearing member is retained by the support shaft at the distal end which is on

a side opposite to the hole in the rotary body.

I. A lock claw capable of elastic deformation protrudes from the bearing member.

J. The bearing member has a flange portion on the base end side of the lock claw.

K. The lock claw has a slanted surface whose distance to a rotation center of the rotary body in the bearing member becomes smaller as it gets closer to the distal end side.

L. The rotary body has a stepped portion capable of being engaged with the lock claw on an inner periphery, and the stepped portion is locked on the base end side of the lock claw and is located between the lock claw and the flange portion.

(6) Act of Defendant of first instance (Exhibits Ko 21, 22, Exhibits Otsu 1 to 7, entire import of oral argument)

Defendant of the first instance sold or offered sales of Defendant's Products as a business at least from December 4, 2015 to May 8, 2017.

(7) Structure of Defendant's Products

A. Structures of Defendant's Products 1 to 7 pertaining to relations with Present Invention 1

a. A beauty instrument in which a pair of pear-shaped rolling portions is supported rotatably around a support shaft on a distal end portion of a body portion made of a grip and a bifurcated portion inserted into and mounted on a distal end of the grip.

b. The two support shafts are inclined forward with respect to the grip.

c. An opening angle between the two support shafts is 74 to 75 degrees.

d. An interval between outer peripheral surfaces of the rolling portions is as in "photos 1 to 7" in the attachment of this judgment, respectively.

x. The two rolling portions are supported by the two support shafts through the bearing member, respectively, in a non-penetrating state.

e. It is constituted such that the skin is picked up by pressing the outer peripheral surface of the two rolling portions to the skin and moving the bodies from the distal end of the grip toward a base end direction.

B. Structures of Defendant's Products 8 and 9 pertaining to the relations with Present Invention 1

a. A beauty instrument in which a pair of pear-shaped rolling portions is supported rotatably around a support shaft on a distal end portion of a body portion made of a grip and a bifurcated portion inserted into and mounted on a distal end of the grip.

b. The two support shafts are inclined forward with respect to the grip.

c. An opening angle between the two support shafts is 75.5 to 76 degrees.

d. An interval between outer peripheral surfaces of the rolling portions is as in

"photos 8, 9" in the attachment of this judgment, respectively.

x. The two rolling portions are supported by the two support shafts through the bearing member, respectively, in a non-penetrating state.

e. It is constituted such that the skin is picked up by pressing the outer peripheral surface of the two rolling portions to the skin and moving the bodies from the distal end of the grip toward a base end direction.

C. Structures of Defendant's Products 1 to 9 pertaining to the relations with Present Invention 2 (see "1 to 3 in reference drawing 1" in the attachment of the judgment for Defendant's Products 1 to 4, and see "1 to 3 in reference drawing 2" in the attachment of the judgment for Defendant's Products 4 to 9. Defendant's Product 4 has two types of structures, that is, "1 to 3 in reference drawing 1" in the attachment of the judgment and "1 to 3 in reference drawing 2" in the attachment of the judgment.)

f. A beauty instrument in which a support shaft is retained by/fixed to a distal end of a bifurcated portion on a base end, and a rolling portion is rotatably supported on the support shaft and configured to give an esthetic action to the body by the rolling portion.

g. The rolling portion is a hollow material having an opening only on the base end side, and a cylindrical fitting 1 (cylindrical member) and a ring-shaped fitting 2 (cylindrical ring) are fitted from the distal end side, incapable of relative rotation with the rolling portion 1 in the hollow in a state where a gap is provided on the distal end side.

Moreover, the rolling portion is in a non-penetrating state in which the distal end of the support shaft is located in the hollow, and the rolling portion, the cylindrical fitting 1 (cylindrical member), and the ring-shaped fitting 2 (cylindrical ring) are rotatably supported by the support shaft through a bearing member.

h. The bearing member is retained by a retaining member with respect to the support shaft on the distal end side which is on a side opposite to the opening of the rolling portion.

i. A lock claw protrudes on a peripheral surface of the bearing member.

j. A flange portion is provided on the base end side of the bearing member.

k. The lock claw of the bearing member has a slanted surface whose distance to a rotation center of the bearing member becomes smaller as it goes toward the distal end side.

l. The cylindrical fitting 1 (cylindrical member) in the hollow of the rolling portion has a large diameter portion with an inner diameter larger than the other portions on an inner peripheral surface on the base end side, and the lock claw is located on the large diameter portion. The ring-shaped fitting 2 (cylindrical ring) in the hollow of the

rolling portion is locked on the base end side of the lock claw and located between the lock claw and the flange portion.

3. Issues

(1) Whether Defendant's Products belong to the technical scope of Present Invention 1 (issue (1)).

(2) Whether Present Patent 1 should be invalidated through a trial for patent invalidation (issue (2)).

(The allegation of lack of inventive step with Korean Design Publication No. 30-0408623 (Exhibit Otsu 31-1) as the primarily cited reference was withdrawn in this court.)

A. Presence/absence of violation of clarity requirement (Article 36, paragraph (6), item (ii) of the Patent Act) (issue (2)A) (issue added in this court)

B. Presence/absence of lack of inventive step with French Publication No. 2891137 (Exhibit Otsu 50-1, hereinafter, referred to as the "Exhibit Otsu 50 document") as the primarily cited reference (issue (2)B) (issue added in this court)

C. Presence/absence of lack of inventive step with the Registered Utility Model No. 3159255 (Exhibit Otsu 45, hereinafter, referred to as the "Exhibit Otsu 45 document") as the primarily cited reference (issue (2)C) (issue added in this court)

(3) Whether Defendant's Products belong to the technical scope of Present Invention 2 (issue (3)).

(4) Whether Present Patent 2 according to Present Invention 2 should be invalidated through a trial for patent invalidation (issue (4)).

(The allegation of lack of inventive step with Unexamined Utility Model Application Publication No. 1994-36635 (Exhibit Otsu 44, hereinafter, referred to as the "Exhibit Otsu 44 document") as the primarily cited reference was withdrawn in this court.)

A. Presence/absence of lack of inventive step with the Exhibit Otsu 45 document as the primarily cited reference (issue (4)A)

B. Presence/absence of lack of inventive step with Unexamined Patent Application Publication No. 1990-104359 (Exhibit Otsu 135, hereinafter, referred to as the "Exhibit Otsu 135 document") as the primarily cited reference (issue (4)B) (issue added in this court)

(5) Amount of damages of Plaintiff of first instance (issue (5))

No. 3 Allegation of the parties on issues

1. Whether Defendant's Products belong to the technical scope of Present Invention 1 (issue (1))

[Allegation of Plaintiff of the first instance]

(1) Fulfillment of constituent feature A

A. The "grip" and the "bifurcated portion" of Defendant's Product correspond to the "handle" of Present Invention 1.

B. Present Description 1 describes that the "ball" of Present Invention 1 includes a balloon shape, an oval sectional shape, an elliptic sectional shape, and the like (paragraphs [0050], [0052]) and thus, the "pear-shaped" rolling portion of Defendant's Product is also included in the "ball" of Present Invention 1. Defendant of the first instance alleges that the "ball" of Present Invention 1 should have a distal end side of the support portion having a semi-spherical shape which is the same as the completely circular ball, but there is no reason for such limited interpretation. The judgment of Other Lawsuit 1 does not make such limited interpretation.

Therefore, the "rolling portion" of Defendant's Product corresponds to the "ball" of Present Invention 1.

C. The "rolling portion" of Defendant's Product is supported rotatably around the support shaft.

D. Thus, Defendant's Product fulfills constituent feature A of Present Invention 1.

(2) Fulfillment of constituent feature B

A. Since the "grip" and the "bifurcated portion" of Defendant's Product correspond to the "handle" of Present Invention 1, the "rolling portion" of Defendant's Product corresponds to the "ball" of Present Invention 1, and this rolling portion is supported rotatably around the support shaft, the axis of the support shaft of the rolling portion corresponds to the "axis of the ball" of Present Invention 1.

B. In view of paragraph [0018] and Figures 3 and 5 of Present Description 1, it is obvious that the "center line" of Present Invention 1 is a line in parallel with a line dividing an angle between outer peripheral tangents of the thickest part of the handle on a side directional view of the handle into two parts.

Since the axis of the support shaft of the rolling portion of Defendant's Product is inclined forward with respect to the "center line" of the handle in the aforementioned meaning, Defendant's Product fulfills the phrase in Present Invention 1 that "the axis of the ball is inclined forward with respect to the center line of the handle".

C. Therefore, Defendant's Product fulfills the constituent feature B of Present Invention 1.

(3) Fulfillment of constituent feature C

Defendant's Product fulfills constituent feature C of Present Invention 1.

(4) Fulfillment of constituent feature D

A. The "rolling portion" of Defendant's Product corresponds to the "ball" of Present Invention 1.

B. Paragraph [0021] of Present Description 1 has description that "the interval D of the outer peripheral surfaces of the balls 17 is for appropriately picking up particularly the skin 20 ... when the interval D between the outer peripheral surfaces of the balls 17 is less than 8 mm, a picking-up effect to the skin 20 located between the balls 17 acts too strongly, which is not preferable", and in view of the description, it is obvious that the "interval between the outer peripheral surfaces of the pair of balls" of Present Invention 1 is based on a spot where the interval is the narrowest when the skin is sandwiched. Reference character D (interval) in Figure 5 of Present Description 1 also illustrates the minimum interval between the pair of balls, and by considering the figure and the description in the aforementioned paragraph, the "interval between the outer peripheral surfaces of the pair of balls" of Present Invention 1 should be regarded to mean a distance between the outer peripheral surfaces between the pair of balls which are the closest to each other.

The minimum interval between the rolling portions of Defendant's Product is as in the following list, and they are all within a range from 10 to 13 mm and thus, Defendant's Product fulfills that "the interval between the outer peripheral surfaces of the pair of balls is set to 10 to 13 mm".

Defendant's Product 1	11.58 mm
Defendant's Product 2	11.62 mm
Defendant's Product 3	12.11 mm
Defendant's Product 4	10.73 mm
Defendant's Product 5	10.54 mm
Defendant's Product 6	12.08 mm
Defendant's Product 7	10.44 mm
Defendant's Product 8	10.00 mm
Defendant's Product 9	11.52 mm

C. Therefore, Defendant's Product fulfills constituent feature D of Present Invention 1.

(5) Fulfillment of constituent feature X

Since the "rolling portion" of Defendant's Product corresponds to the "ball" in Present Invention 1, and the rolling portion is supported by the support shaft through the bearing member without the support shaft's penetration through the rolling portion, Defendant's Product fulfills constituent feature X of Present Invention 1.

(6) Fulfillment of constituent feature E

Since the "rolling portion" of Defendant's Product corresponds to the "ball" of Present Invention 1, Defendant's Product fulfills constituent feature E of Present Invention 1.

[Allegation of Defendant of first instance]

(1) It is found that Defendant's Product fulfills constituent feature C of Present Invention 1.

(2) The "ball" (constituent features A, B, D, E, and X) of Present Invention 1 is not included.

A. Meaning of the "ball" of Present Invention 1

The judgment of Other Lawsuit 1 found that the shape of the "ball" of Present Invention 1 has a completely circular shape, and the distal end side of the support shaft has the semi-spherical shape which is the same as the ball having the completely circular shape, and the handle 11 side has a curved surface shape with a curvature larger than that of the semi-sphere. And the aforementioned judgment judged on the premise of the finding that, since the article as above can pick up the skin and moreover, can hold the picking-up state for a long time, it exerts the function and effect of Present Invention 1.

Therefore, the "ball" of Present Invention 1 should have the semi-spherical shape on the distal end side of the support shaft which is the same as the ball with the completely circular shape.

B. Fulfillment of Defendant's Product

The rolling portion of Defendant's Product does not have the distal end side of the support shaft with the semi-spherical shape which is the same as the ball having the completely circular shape (Exhibit Otsu 149), and Defendant's Product does not exert the function and effect found by the aforementioned judgment (Exhibits Otsu 150 to 152 [including branch number]).

C. Therefore, Defendant's Product does not include the "ball" of Present Invention 1 or does not fulfill constituent features A, B, D, E, and X of Present Invention 1.

(3) The "axis of the ball is inclined forward with respect to the center line of the

handle" (constituent feature B) of Present Invention 1 is not fulfilled

A. Meaning of the "center line of the handle"

When the "center line of the handle" of Present Invention 1 is interpreted with technical consistency, the following three interpretations can be established for the constituent feature B.

[i] With limitation to the handle having the shape illustrated in Figure 3 of Present Description 1, it is supposed to be the "center line (a line in parallel with a line dividing an angle between outer peripheral tangents z of the thickest portion of the handle 11 into two parts) x of the handle 11" (paragraph [0018]).

[ii] On the basis only of the description of paragraph [0018] of Present Description 1, it is supposed to be the "center line (a line in parallel with a line dividing an angle between outer peripheral tangents z of the thickest portion of the handle into two parts) x of the handle 11".

[iii] Paragraph [0057] of Present Description 1 has the description that the shape of the handle can be changed to a cylindrical shape, a columnar shape, a prism shape and the like, and since these shapes are symmetrical shapes from which the "center" can be conceived, the "handle" is supposed to be a symmetrical shape from which the center line can be conceived.

B. Fulfillment of Defendant's Product

(a) In the case of interpretation of the aforementioned A[i]

Since the handle having the shape described in Figure 3 of Present Description 1 and the grip of Defendant's Product have different shapes, Defendant's Product does not fulfill the "axis of the ball is inclined forward with respect to the center line of the handle" of Present Invention 1.

(b) In the case of interpretation of the aforementioned A[ii]

Since the thickest portion of the grip of Defendant's Product is a root portion of the grip on a front view (Exhibits Otsu 1 to 7), the center line of the grip is the line dividing the angle between the outer peripheral tangents of the root portions of the grip into two parts, but the axis of the rolling portion of Defendant's Product is not inclined forward with respect to the center line.

Therefore, Defendant's Product does not fulfill the "axis of the ball is inclined forward with respect to the center line of the handle" of Present Invention 1.

(c) In the case of interpretation of the aforementioned A[iii]

The two support shafts of Defendant's Product are inclined forward with respect to the grip, but since the shape of the grip is an asymmetrical shape in a front view and the center line cannot be conceived therefrom, it does not have the structure of

the "center line of the handle" of constituent feature B, and the axis is not inclined forward with respect to the center line of the handle.

Therefore, Defendant's Product does not fulfill the "axis of the ball is inclined forward with respect to the center line of the handle" of Present Invention 1.

C. Thus, Defendant's product does not fulfill constituent feature B of Present Invention 1.

(4) Defendant's product does not fulfill the "interval between the outer peripheral surfaces of the pair of balls is set to 10 to 13 mm" (constituent feature D) of Present Invention 1

A. Meaning of the "interval between the outer peripheral surfaces of the pair of balls"

(a) In the balloon-shaped balls, the picked-up skin is not held at a spot where the distance between the pair of balls is shortest but between spots moved slightly closer to the support shaft base end side than a diameter portion.

In Figure 5 of Present Description 1, by using a ratio between a distance M from the distal end of the ball 17 to a diameter L and a distance N from the diameter L of the ball to the interval D spot, the spot of the aforementioned "slightly closer to the support shaft base end side" can be specified, and the ratio between the aforementioned N and M is 0.7 (N/M = 0.7).

Present Description 1 does not have a figure separately illustrating the interval between the outer peripheral surfaces of the balls on the balloon-shaped roller and thus, Figure 5 needs to be applicable also to Figures 8 and 9 for the interval between the outer peripheral surfaces of the balloon-shaped balls to be disclosed in Present Description 1 and then, the interval between the outer peripheral surfaces of the pair of balloon-shaped balls 17 is a distance between spots moved in parallel from a center m of the diameter of the balloon-shaped ball 17 only by 0.7 times of a radius M.

(b) Plaintiff of the first instance alleges that the "interval between the outer peripheral surfaces of the pair of balls" of Present Invention 1 means the distance between the outer peripheral surfaces of the pair of balls which are the closest.

However, the Scope of Claims of Present Invention 1 does not limit the narrowest portion to the interval between the outer peripheral surfaces of the pair of balls, and Present Description 1 does not describe that the narrowest portion is the interval between the outer peripheral surfaces of the pair of balls, either.

Moreover, assuming that the "interval between the outer peripheral surfaces

of the pair of balls" is the distance between the outer peripheral surfaces of the balls which are the closest in the balloon-shaped roller, if the base end portion of the roller is extended so as to have the interval of the narrowest portion less than 10 mm, it is no longer included in the technical scope of Present Invention 1 even though the portion in contact with the skin stays the same and the function and effect is not changed, which causes technical conflict.

Therefore, the aforementioned allegation by Plaintiff of the first instance has no ground.

B. Fulfillment of Defendant's Product

The interval between the spots on the outer peripheral surfaces when moved in parallel to the base end side from the center with respect to the distance M from the center of the maximum diameter of the pair of rolling portions to the distal end side only by 0.7 times in Defendant's Product is larger than 13 mm in any case (Exhibits Otsu 177 to 189).

Therefore, Defendant's Product does not fulfill the "interval between the outer peripheral surfaces of the pair of balls" of Present Invention 1" is set to 10 to 13 mm".

C. Thus, Defendant's Product does not fulfill constituent feature D of Present Invention 1.

2. Whether Present Patent 1 should be invalidated through a trial for patent invalidation (issue (2))

The allegations by the parties on A to C of issue (2) are as the "allegations by the parties on issue (2)" in the attachment.

3. Whether Defendant's Product belongs to the technical scope of Present Invention 2 (issue (3))

[Allegation of Plaintiff of first instance]

(1) Defendant's product includes the "rotary body" of Present Invention 2

A. The cap material 29 is not described as a specifying matter in the Scope of Claims according to Present Invention 2, and Present Description 2 does not describe that the cap material 29 is an indispensable constituent element of Present Invention 2, either.

Therefore, since the cap material 29 cannot be interpreted to be a constituent element of Present Invention 2, it cannot be considered that constituent features

F, G, H, K, and L are not fulfilled because Defendant's Product does not include the cap material 29.

B. Defendant of the first instance alleges in Other Lawsuit 2 that Plaintiff of the first instance alleged that the cap material 29 was the constituent element of the "rotary body" of Present Invention 2 and it was also found as such in the judgment of the lawsuit.

However, Plaintiff of the first instance alleged in Other Lawsuit 2 that the cap material 29 at the working example level was a part of the "rotary body" of the constituent feature of Present Invention 2 and did not allege that the aforementioned "rotary body" had the cap material 29 as an indispensable constituent element or the judgment did not find such, either.

(2) Defendant's Product fulfills constituent feature F of Present Invention 2

By reading the wording that "rotatably supported on the distal end side of the support shaft" of Present Invention 2, a person ordinarily skilled in the art can understand that the rotary body is supported not on the base end side of the support shaft but on the distal end side thereof.

In Defendant's Product, the support shaft is retained by/fixed to the distal end of the bifurcated portion on the base end side thereof, and although there is a gap on the distal end side of the support shaft itself on the distal end side opposite thereto, since the rolling portion is supported through the bearing member, and it is a beauty instrument configured to give an esthetic action to the body by the rolling portion, Defendant's Product fulfills constituent feature F.

(3) Defendant's Product fulfills constituent feature G of Present Invention 2

Defendant's Product should be regarded to correspond to the "rotary body" as a collective body of the rolling portion, the cylindrical ring (fitting 2), and the cylindrical member (fitting 1), and since it is obvious that the distal end of the support shaft is located inside the rotary body as the collective body in the non-penetrating state, and is supported by the support shaft through the bearing member, Defendant's Product fulfills constituent feature G.

(4) Defendant's Product fulfills constituent feature 1 of Present Invention 2

A. Meaning of "lock claw capable of elastic deformation"

The "lock claw" of Present Invention 2 means the whole body combining the slanted surface in the portion protruding from the bearing member (hereinafter, referred to as the "slanted portion") and a rectangular-shaped portion (hereinafter, referred to as the "rectangular portion"), and if there is no

rectangular portion, it means the slanted portion, and if such a portion is capable of elastic deformation, it corresponds to the "lock claw capable of elastic deformation".

The reasons are as follows.

(a) According to Figure 8 of Present Description 2, the portion corresponding to the "lock claw" of constituent feature 1 is supposed to mean the whole body combining the slanted portion and the rectangular portion.

(b) Constituent feature K reads that "the lock claw ... has a slanted surface" and thus, the lock claw is not only the slanted portion but can be considered to be a portion including the slanted portion.

B. Fulfillment of Defendant's Product

With regard to the portion protruding from the bearing member of Defendant's Product and engaged with the stepped portion of the rotary body (hereinafter, referred to as the "portion corresponding to lock claw"), when the rectangular portion is curved and elastically deformed, the slanted portion formed integrally with that is also elastically deformed and thus, it corresponds to the "lock claw capable of elastic deformation" of Present Invention 2 and thus, Defendant's product fulfills constituent feature I.

C. Defendant of the first instance alleges that the judgment of Other Lawsuit 2 finds that only the slanted portion corresponds to the "lock claw" of Present Invention 2, but the judgment finds that the slanted portion and the rectangular portion integrally form the "lock claw", and the aforementioned allegation by Defendant of the first instance has no ground.

(5) Defendant's Product fulfills constituent feature L of Present Invention 2

In interpretation of constituent feature L of Present Invention 2, there is no need to make interpretation with limitation to the specific structure illustrated in the embodiment.

In Defendant's Product, the collective body including the rolling portion, the cylindrical ring, and the cylindrical member corresponds to the "rotary body", and a step is formed on an inner periphery of the rolling portion by the cylindrical ring and the cylindrical member.

That is, since the stepped portion is formed by combination of the large diameter portion with a larger inner diameter as compared with the other portions of the fitting 1 (where the lock claw is located) and the fitting 2 located between the lock claw and the flange portion on the inner peripheral surface of the base end side, Defendant's Product fulfills constituent feature L.

(6) Other than the above, since Defendant's Product fulfills constituent features H, J, and K of Present Invention 2, Defendant's Product belongs to the technical scope of Present Invention 2.

[Allegation of Defendant of the first instance]

As will be described below, Defendant's Product does not belong to the technical scope of Present Invention 2.

(1) Defendant's Product does not include the "rotary body" of Present Invention 2

A. Meaning of the "rotary body"

The "rotary body" of Present Invention 2 has the cap material 29 in the working example of Present Invention 2 as an indispensable element, and a member not including the cap material 29 does not correspond to the "rotary body" of Present Invention 2.

The reasons are as follows.

(a) In the structure of Present Invention 2, the cap material 29 is needed in order to make the rotary body stable.

(b) Finding of the gist of the invention of Present Invention 2 made an issue in Other Lawsuit 2, and Plaintiff of the first instance alleged in that issue that the cap material 29 was the constituent element of the "rotary body" of Present Invention 2, and the judgment of the lawsuit also judged as such.

As described above, in the finding of the gist of the invention of Present Invention 2, although the cap material 29 was found to be the constituent element of the "rotary body", if the cap material 29 is found not to be the constituent element of the "rotary body" in the finding of the technical scope of Present Invention 2 in the infringement lawsuit, the technical scope of the invention becomes wider than the gist of the invention, which is irrational.

Moreover, since Plaintiff of first instance alleged in Other Lawsuit 2 that the cap material 29 is a constituent element of the "rotary body" of Present Invention 2, to make allegation contradicting the allegation in this lawsuit violates the obligation of trust and sincerity in the legal procedures and is not allowed under application of analogy of Article 2 of the Code of Civil Procedure.

(c) If the positional relation between the rotary body and the support shaft that the rotary body is rotatably supported on the distal end side is to be specified, it only needs to be specified as the "rotary body rotatably supported by the support shaft", but the Scope of Claims according to Present Invention 2

specifies it as the "rotary body rotatably supported on the distal end side of the support shaft" and from this point, too, it is found that the cap material 29 is an indispensable constituent element in Present Invention 2.

B. Fulfillment of Defendant's Product

Since Defendant's Product does not include the cap material 29, it does not include the "rotary body" of Present Invention 2. Therefore, it does not fulfill constituent features F, G, H, K, and L of Present Invention 2.

(2) Defendant's Product does not fulfill that the "rotary body supported ... on the distal end side of the support shaft" (constituent feature F) of Present Invention 2

As described in the aforementioned (1), in Present Invention 2, the cap material 29 is an indispensable structure in order to make the rotary body stable and thus, constituent feature F is limited to that the rotary body is supported "on the distal end side of the support shaft" in the form as illustrated in Figure 4 of Present Description 2.

Since the two rotary bodies in Defendant's Product are rotatably supported by the portion other than the distal end side of the support shaft (Exhibits Otsu 1 to 7-3b), Defendant's Product does not fulfill constituent feature F.

(3) Defendant's Product does not fulfill the "rotary body has a hole only on the base end side" (constituent feature G) of Present Invention 2

The rotary body of Present Invention 2 refers to each of the members supported by the support shaft through the bearing member.

In Defendant's Product, since the rolling portion, the cylindrical ring, and the cylindrical member are rotatably supported by the bearing member, these are all included in the "rotary body", respectively. Moreover, although the hole is provided in the rolling member only on the base end side, since the hole is provided on both the base end side and the distal end side of the cylindrical ring and the cylindrical member, the hole is supposed to be provided on the distal end side of the rotary body, which does not fulfill constituent feature G.

(4) Defendant's Product does not include the "lock claw capable of elastic deformation" of Present Invention 2 (constituent feature I)

A. Meaning of the "lock claw capable of elastic deformation"

To be the "lock claw capable of elastic deformation" of Present Invention 2, the slanted portion is required to be capable of elastic deformation, and if

the slanted portion is not elastically deformed, even if the rectangular portion is elastically deformed, whereby the slanted portion sinks toward an inner side in a radial direction, it cannot be the "lock claw capable of elastic deformation".

The reasons are as follows.

(a) In view of the expression "the lock claw capable of elastic deformation protrudes from the bearing member." of constituent feature I, the "lock claw" of the constituent feature is a portion protruding from the bearing member, but according to figures 4 and 8 of Present Description 2, the portion protruding from the bearing member is only the slanted portion, and the rectangular portion does not protrude.

(b) The judgment of Other Lawsuit 2 finds that the lock claw and the rectangular portion have different structures, and the slanted portion configured separately from the rectangular portion is elastically deformed.

(c) Even though the slanted portion is not elastically deformed, if such a structure that the slanted portion sinks toward the inner side in the radial direction by elastic deformation of the rectangular portion is included, the scope of claims specifies that "when the slanted surface is pressed, the portion having the rectangular shape is elastically deformed, and the slanted surface sinks toward the inner side in the radial direction and is then restored, whereby the stepped portion is locked on the base end side of the lock claw" not as the "lock claw capable of elastic deformation".

(d) The structure that "when the slanted surface is pressed, the portion having the rectangular shape is elastically deformed, and the slanted surface sinks toward the inner side in the radial direction and is then restored, whereby the stepped portion is locked on the base end side of the lock claw" without elastic deformation of the lock claw is a publicly known art. Present Invention 2 does not employ such a publicly-known structure but specifies that the "lock claw capable of elastic deformation protrudes from the bearing member", whereby Present Invention 2 was granted a patent.

(e) When the "lock claw" is interpreted as the whole combining the slanted portion and the rectangular portion, the "base end side of the lock claw" also includes the rectangular portion and the portion connected to a peripheral surface of a cylindrical portion and includes an art engaged with the stepped portion on the portion side, but such an art is irrational.

B. Fulfillment of Defendant's Product

In the portion corresponding to the lock claw of Defendant's Product, the rectangular portion is elastically deformed, and the slanted portion is not elastically deformed and thus, it does not correspond to the "lock claw capable of elastic deformation" and thus, Defendant's Product does not fulfill constituent feature I.

Even if the "lock claw" of Present Invention 2 is interpreted as the combination of the slanted portion and the rectangular portion, in all Defendant's Products 1 to 3 and a part of Defendant's Product 4, the portion corresponding to the lock claw is constituted only of the slanted portion and thus, these Defendant's Products do not have the "lock claw" of Present Invention 2 and therefore, do not fulfill constituent feature I.

(5) Defendant's Product does not include the "stepped portion" of Present Invention 2 (constituent feature L)

The literal meaning of the "step" is a "difference of elevation where a step is formed", and a spot having a difference of elevation on an inner periphery of the rotary body of Present Invention 2 is the "stepped portion". According to Present Description 2, the written amendment (Exhibit Otsu 22), and the written statement (Exhibit Otsu 23), in Present Invention 2, the structure of the stepped portion is limited to the stepped portion 28a formed on the inner periphery of a core material 28 illustrated in Figure 4 of Present Description 2, and to make the stepped portion a member separate from the core material is not assumed.

In Defendant's Product, the rotary body has the rolling portion and the cylindrical ring and the cylindrical member fitted in the inner periphery of the rolling portion, and the cylindrical ring has the structure locked on the base end side of the lack claw of the bearing and located between the lock claw and the flange portion. The rolling portion and the cylindrical ring of Defendant's Product are different members, and even if they are regarded as one rotary body, the cylindrical ring is not the stepped portion having a difference of elevation as formed on the inner periphery of the rotary body.

Therefore, there is no stepped portion on an inner peripheral portion of the rotary body in Defendant's Product and it does not fulfill constituent feature L.

4. Whether Present Patent 2 should be invalidated through a trial for patent invalidation (presence/absence of lack of inventive step with Exhibit Otsu 45

document as the primarily cited reference) (issue (4)A)

[Allegation of Defendant of first instance]

(1) Primarily cited reference

A. The Exhibit Otsu 45 document has description on the following invention (hereinafter, referred to as the "Exhibit Otsu 45 invention alleged by Defendant of first instance".)

"A magnet beauty roller including a small-diameter portion 4b which is a support shaft for rotating a roller portion 5 and a roller portion 5 rotatably supported by the small-diameter portion 4b in a roller support portion 4 provided on an upper part of a grip portion 3 and configured such that an esthetic action is given to a body by the roller portion 5, in which the roller portion 5 has a hole only on a base end side, the roller portion 5 is supported by the small-diameter portion 4b through a bearing 8 in a non-penetrating state where a distal end of the small-diameter portion 4b is located inside thereof, the bearing 8 is retained by the small-diameter portion 4b, and the roller portion 5 retains the bearing 8 on an inner periphery"

B. The "grip portion 3" of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance corresponds to the "handle" of Present Invention 2, and hereinafter, similarly, the "roller portion 5" to the "rotary body", the "small-diameter portion 4b" to the "support shaft", and the "bearing 8" to the "bearing member".

(2) Common features and different features

Common features and different features between Present Invention 2 and the Exhibit Otsu 45 invention alleged by Defendant of the first instance are as follows.

A. Common Features

"A beauty instrument including a support shaft provided on a handle and a rotary body rotatably supported by the support shaft and configured to give an esthetic action to a body by the rotary body, in which the rotary body has a hole only on a base end side, the rotary body is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof, and the bearing member is retained by the support shaft, and the rotary body retains the bearing member on an inner periphery"

B. Different Features

(a) Different Feature 1

In Present Invention 2, the support shaft is retained by/fixed to the base end of the handle, while in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, the small-diameter portion 4b is formed integrally with the grip portion 3 and is not retained by/fixed to the grip portion 3

(b) Different Feature 2

In Present Invention 2, the rotary body is rotatably supported on the distal end side of the support shaft, while in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, the roller portion 5 is rotatably supported by a portion other than the distal end side of the small-diameter portion 4b

(c) Different Feature 3

In Present Invention 2, the bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body, while in the Exhibit Otsu 45 invention alleged by Defendant of first instance, retention of the bearing 8 is not performed on the distal end of the small-diameter portion 4b

(d) Different Feature 4

The structure of the bearing member of Present Invention 2 and the structure of the bearing 8 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance are different

(e) Different Feature 5

In the rotary body of Present Invention 2, the stepped portion located between the lock claw and the flange portion of the bearing member is provided, whereas in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, there is no such structure on the inner periphery of the roller portion 5.

(3)How the Different Features could have been easily conceived of

A. Different Feature 1

In a beauty massaging tool using a rotary body, whether the support shaft is retained by/fixed to the handle or integrally formed with the handle is only a design mater. In Exhibit Otsu 24, a core shaft which is the support shaft of the rotary body is retained by/fixed to the handle, and in Exhibit Otsu 25, the spindle is retrained by /fixed to the handle, while in Exhibits Otsu 28 and 29, the support shaft is integrally formed with the handle.

Therefore, in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, too, to retain/fix the small-diameter portion 4b which is the support shaft of the roller portion 5 to the grip portion 3 could have been easily conceived of by a person ordinarily skilled in the art.

B. Different Feature 2

In the Exhibit Otsu 45 invention alleged by Defendant of the first instance, to dispose the bearing 8 on the distal end side of the small-diameter portion 4b is only a design matter, while by disposing the bearing 8 on the distal end side of the small-diameter portion 4b, the roller portion 5 is rotatably supported on the distal end side

of the small-diameter portion 4b and thus, to dispose the roller portion 5 on the distal end side of the small-diameter portion 4b so as to rotatably support it could have been easily conceived of by a person ordinarily skilled in the art.

C. Different Feature 3

(a) In the Exhibit Otsu 45 invention alleged by Defendant of the first instance, a case in which a rolling bearing is used as the bearing 8 is assumed, and paragraph [0014] in the Exhibit Otsu 45 document describes that a sliding bearing such as a plastic bearing or the like is preferable as a substitution example of the bearing 8. And when the sliding bearing made of plastic is used, a person ordinarily skilled in the art could have easily conceived of retaining with a structure of a retaining ring or the like on the distal end of the small-diameter portion 4b so that the bearing is not removed.

(b) The judgment in prior instance states that, in the invention described in the Exhibit Otsu 45 document, it is assumed that the bearing 8 is replaced by a sliding bearing made of plastic, but whether the retention is needed or not at this time is not described in the Exhibit Otsu 45 document, and even if the retention is needed, a position where the retention is performed cannot be unambiguously determined by a person ordinarily skilled in the art, and held that the structure according to Different Feature 3 could not have been easily conceived of by a person ordinarily skilled in the art.

However, in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, the description that the support shaft slides on the bearing made of plastic and is capable of rotation in a scheduled direction means that the support shaft is movable in a rotating direction and a perpendicular direction (a direction in which the support shaft is removed from the bearing) and thus, it is technically inevitable that the retaining member is needed in the sliding bearing.

And if the retaining member is needed, to retain the distal end portion of the holding component (the bearing in this case) by a retaining ring or the like as in a lower drawing illustrated in the Exhibit Otsu 59 is a generally-known art. Moreover, as described in the Exhibit Otsu 44 document (paragraph [0006]) and the Exhibit Otsu 163 (page 6, lines 3 to 14), the art in which the bearing member is retained at the distal end of the support shaft is a well-known art, and a similar judgment was made also in the Japan Patent Office (Exhibits Otsu 158, 160).

Therefore, in the Exhibit Otsu 45 invention alleged by Defendant of the first instance, when the sliding bearing made of plastic is used, and the retaining member is to be mounted, the retaining ring or the like is supposed to be

mounted on the distal end portion which is on a side opposite to the hole in the roller portion 5 of the bearing 8.

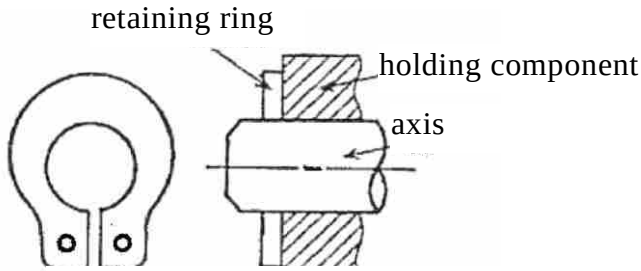


Figure 4 GRIP RETAINING RING

(c) Plaintiff of the first instance alleges that Present Invention 2 is not such an art that "the bearing member is retained at the distal end of the support shaft" but the bearing member of Present Invention 2 is retained by the support shaft at the distal end on a side opposite to the hole of the rotary body.

However, in the Exhibit Otsu 163, the art can be confirmed such that the "collar 12 is retained by the support shaft 4 at the distal end which is on a side opposite to the hole of the rotary body".

And it is obvious that the art that the "bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body" is a well-known art also from the judgment by the Japan Patent Office (Exhibits Otsu 158, 160).

D. Different Feature 4

(a) Unexamined Patent Application Publication No. 2002-340001 (Exhibit Otsu 46, hereinafter, referred to as the "Exhibit Otsu 46 document") describes the following art (hereinafter, referred to as the "Exhibit Otsu 46 art").

"a sliding bearing with flange which has an elastic lock piece capable of elastic deformation protruding and a flange on a base end side of the elastic lock piece, and the elastic lock piece has a slanted surface whose distance to a rotation center becomes smaller as it goes toward the distal end side."

(b) Utility Model Publication No. 1996-9455 (Exhibit Otsu 47, hereinafter, referred to as the "Exhibit Otsu 47 document") describes each of the following arts (hereinafter, referred to as the "Exhibit Otsu 47-1 art" and the like, respectively, and also as the "Exhibit Otsu 47 art".).

a. Exhibit Otsu 47-1 art

"An inclined surface portion capable of elastic deformation protrudes

from the bearing, the bearing has a flange portion on the base end side of the inclined surface portion, and the inclined surface portion has a slanted surface whose distance to the rotation center in the bearing becomes smaller as it goes toward the distal end side."

b. Exhibit Otsu 47-2 art

"A tongue piece portion capable of elastic deformation protrudes from the bearing, the bearing has a flange portion on the base end side of the tongue piece portion, and the tongue piece portion has a slanted surface whose distance to the rotation center becomes smaller as it goes toward the distal end side."

c. Exhibit Otsu 47-3 art

"Two tongue piece portions capable of elastic deformation protrude from the bearing, the bearing has a flange portion on the base end side of the tongue piece portion, and the tongue piece portion has a slanted surface whose distance to the rotation center in the bearing becomes smaller as it goes toward the distal end side."

(c) As in the aforementioned C, replacement of the roller bearing with the sliding bearing made of plastic is easy for a person ordinarily skilled in the art. And the Exhibit Otsu 46 art and the Exhibit Otsu 47 art have the same structure as the bearing member in Present Invention 2.

Therefore, replacement of the bearing 8 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance with the bearing of the Exhibit Otsu 46 art or the Exhibit Otsu 47 art could have been easily conceived of.

(d) The judgment in prior instance holds that the bearing disclosed in the Exhibit Otsu 46 document has an elastic lock piece and a flange for supporting a plate material between them, an outer peripheral surface is not circumferential, and a length in an axial direction is relatively small, the bearing disclosed in the Exhibit Otsu 47 document also has a flange portion having an annular groove to be fitted with a plate-shaped mounting member and the tongue piece portion and the flange portion for sandwiching and supporting the mounting member between them, the outer peripheral surface is not circumferential, and the length in the axial direction is also relatively small and thus, they do not have the shape capable of being attached to the large-diameter portion 4a of the invention described in the Exhibit Otsu 45 document for supporting the roller portion 5 and thus, the invention described in the Exhibit Otsu 45 document is different from the Exhibit Otsu 46 art or the Exhibit Otsu 47 art in terms of problems,

purposes, applications, and functions and thus, there is no motivation for using each of the aforementioned arts as the bearing of the invention described in the Exhibit Otsu 45 document.

However, the bearing member is a publicly-known art and is mounted on various housings, and to tune the shape of the housing in accordance with the shape of the bearing when the bearing is to be mounted on the housing is within a range of a simple design change for a person ordinarily skilled in the art.

And the bearing of the Exhibit Otsu 46 art is to position the housing between the elastic lock piece and the flange, and a person ordinarily skilled in the art could have easily conceived of an idea that a stepped portion located between the lock piece and the flange only needs to be provided on the inner periphery of the roller portion 5. Moreover, the bearing of the Exhibit Otsu 47 art is to position the housing between the inclined surface portion and the flange portion or between the tongue piece portion and the flange portion, and a person ordinarily skilled in the art could have easily conceived of the idea that the stepped portion located between them only needs to be provided on the inner periphery of the roller portion 5.

Moreover, the bearing is not limited to the beauty instruments but is widely known as a mechanism having general purposes (Exhibits Otsu 56 to 59), and provided that the Exhibit Otsu 45 invention alleged by Defendant of the first instance has the same function as the Exhibit Otsu 46 art and the Exhibit Otsu 47 art, the different features between the two in terms of the problems, purposes, and applications do not constitute reasons that deny the motivation.

Furthermore, as described in the Exhibit Otsu 164, the bearing having a projection with a deflecting distal end is not limited to mounting on the plate-shaped article and thus, the bearing described in the Exhibit Otsu 46 art and the Exhibit Otsu 47 art is not limited to mounting on the plate-shaped article.

Therefore, the determination on Different Feature 4 in the judgment in prior instance is wrong.

E. Different Feature 5

(a) The Exhibit Otsu 44 document describes the following art (hereinafter, referred to as the "Exhibit Otsu 44 art").

"A beauty massaging tool including a support shaft retained by/fixed to a handle on a base end and a massage member rotatably supported on a distal end side of the support shaft and giving an esthetic action to the body by the massage member, in which the massage member has a hole only on the base end side, the massage

member is supported by the support shaft through a cylindrical body in a non-penetrating state where the distal end of the support shaft is located inside thereof, the cylindrical body is retained by a nut to the support shaft at the distal end which is on a side opposite to the hole of the massage member, a stepped portion protrudes from the cylindrical body, the massage member has a projecting portion capable of being engaged with the stepped portion on an inner periphery, and the projecting portion is located on the base end side of the stepped portion".

(b) As described in the aforementioned D, replacement of the bearing 8 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance with the bearing of the Exhibit Otsu 46 art or the Exhibit Otsu 47 art could have been easily conceived of, and in that case, to provide a stepped portion located between the elastic lock piece and the flange of the Exhibit Otsu 46 art, between the inclined surface portion and the flange portion of the Exhibit Otsu 47-1 art, and between the tongue piece portion and the flange portion of the Exhibit Otsu 47-2 art and the Exhibit Otsu 47-3 art on the inner periphery of the roller portion 5 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance could have been easily conceived of.

Moreover, by employing the projecting portion of the Exhibit Otsu 44 art for the Exhibit Otsu 45 invention alleged by Defendant of the first instance, mounting of the bearing of the Exhibit Otsu 46 art or the Exhibit Otsu 47 art on the roller portion 5 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance could have been easily conceived of.

Therefore, the structure of Different Feature 5 could have been easily conceived of by applying [i] the Exhibit Otsu 44 art and [ii] either one of the Exhibit Otsu 46 art and the Exhibit Otsu 47 art to the Exhibit Otsu 45 invention alleged by Defendant of the first instance.

[Allegation of Plaintiff of first instance]

(1)The Exhibit Otsu 45 document describes the following invention (hereinafter, referred to as the "Exhibit Otsu 45 invention alleged by Plaintiff of first instance").

"A magnet beauty roller including a small-diameter portion 4b which is a support shaft for rotating a roller portion 5 and the roller portion 5 rotatably supported by the small-diameter portion 4b in a roller support portion 4 provided on an upper part of a grip portion 3 and configured such that an esthetic action is given to a body by the roller portion 5, characterized in that the roller portion 5 has a hole only on a base end side, the roller portion 5 is supported by the small-diameter

portion 4b through a bearing 8 in a non-penetrating state where a distal end of the small-diameter portion 4b is located inside thereof, the bearing 8 is retained by the small-diameter portion 4b, the bearing 8 has an outer peripheral surface having a cylindrical shape, and an inner periphery of a large diameter hole of the roller portion 5 has a cylindrical shape".

(2) Different Features

Different Features between Present Invention 2 and the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance are as follows other than Different Feature 1 and Different Feature 2.

A. Different Feature 3'

In Present Invention 2, the bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body, while in the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, presence/absence of specific retaining of the bearing 8 is not clear.

B. Different Feature 4'

In Present Invention 2, the lock claw capable of elastic deformation protrudes from the bearing member, the bearing member has a flange portion on the base end side of the lock claw, and the lock claw has a slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, while the bearing 8 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance has an outer peripheral surface having a cylindrical shape.

C. Different Feature 5'

In Present Invention 2, the rotary body has a stepped portion capable of being engaged with the lock claw on an inner periphery of the rotary body, and the stepped portion is locked on the base end side of the lock claw and located between the lock claw and the flange portion, while in the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, an inner periphery of a large diameter hole of the roller portion 5 has a cylindrical shape.

(3) The structure according to the Different Features could not have been easily conceived of

A. Different Feature 1

The Exhibits Otsu 24 and 25 cited by Defendant of the first instance are the one having four axes in a circumferential direction and the one having a structure in which the spindle can move in the axial direction, which are different in the structure from the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance

and thus, there is no motivation for employing these structures.

Moreover, even though the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance is combined with the Exhibits Otsu 24 and 25, the point that "the rotary body is supported by the support shaft with the distal end non-penetrating" is the different feature and thus, it does not reach Present Invention 2.

B. Different Feature 2

Defendant of the first instance alleges that by disposing the bearing 8 on the distal end side of the small-diameter portion 4b of the Exhibit Otsu 45 invention alleged by Defendant of the first instance, the roller portion 5 is rotatably supported on the distal end side of the small-diameter portion 4b, and this point is a design matter, but there are no explanation for grounds for the aforementioned points to be the design matter or for motivation for performing such changes, and the aforementioned changes could not have been easily conceived of.

C. Different Feature 3'

(a) Even though the bearing 8 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance is replaced with the sliding bearing made of plastic, whether retention is needed or not is not clear. Even if the retention is needed, at what portion the retaining measure is to be taken is not determined unambiguously and thus, to take the retaining measure at the distal end of the small-diameter portion 4b could not have been easily conceived of.

(b) Defendant of the first instance refers to the Exhibit Otsu 59 on the premise of presence of Different Feature 3 between Present Invention 2 and the invention described in the Exhibit Otsu 45 document so as to point out that there is a publicly-known art that retention is needed when the sliding bearing made of plastic is used and then, alleges that the retaining ring is needed for the distal end portion of the bearing and the judgment in prior instance is erroneous.

However, even though the point that the "retaining ring" is used as the retaining member can be found by the Exhibit Otsu 59, at what portion and in what form the retention is to be performed is not determined unambiguously for a person ordinarily skilled in the art and thus, in the case where the sliding bearing made of plastic is used for the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, it cannot be so evaluated that even the points that the retaining member is needed, the "retaining ring" described in the Exhibit Otsu 59 is mounted as the retaining member, and the "retaining ring" is disposed on the distal end side which is on a side opposite to the hole of the rotary body could have been easily conceived of.

Moreover, Defendant of the first instance alleges that, from the described matter in the Exhibit Otsu 44 document and the Exhibit Otsu 163, the "art that the bearing member is retained at the distal end of the support shaft" is only a well-known art.

However, the "bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body" in Present Invention 2, and the "distal end" here refers to the distal end of the "bearing member" and not the distal end of the support shaft. And in Figure 1 of the Exhibit Otsu 44 document, the "cylindrical body 15" corresponding to the bearing member is retained closer to an inner side (right in the figure) than the distal end (left end in the figure) and cannot be the distal end.

D. Different Feature 4'

(a) The bearing 8 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance has the outer peripheral surface thereof formed having a cylindrical shape and is inserted into the large-diameter portion of the roller portion formed similarly having the cylindrical shape, and it can be understood that the roller portion 5 is supported by this whole outer peripheral surface. Even if the bearing 8 having such a shape is replaced with the sliding bearing made of plastic, the outer peripheral surface of the sliding bearing made of plastic to be applied also has a cylindrical shape conforming to the aforementioned shape of the outer diameter portion of the roller portion 5 and should have a structure which supports the roller portion 5 by the outer peripheral surface.

On the other hand, the bearing of the Exhibit Otsu 46 art has the elastic lock piece and the flange for supporting/fixing the support plate between them and does not have a shape that can be attached to the large-diameter portion 4a of the roller portion 5.

The bearing of the Exhibit Otsu 47 art also has the tongue piece portion and the flange portion in order to support/fix the thin plate between them and does not have a shape that can be attached to the large-diameter portion 4a of the roller portion 5 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance.

Therefore, since the problems, purposes, applications, and functions are different, there is no motivation for using the bearing of the Exhibit Otsu 46 art or the Exhibit Otsu 47 art for the bearing of the large-diameter portion 4a of the roller portion 5 of the Exhibit Otsu 45 invention alleged by Plaintiff

of the first instance.

(b) Defendant of the first instance alleges that the bearing of the Exhibit Otsu 46 art is to position the housing between the elastic lock piece and the flange, while the bearing of the Exhibit Otsu 47 art is to position the housing between the inclined surface portion and the flange portion or between the tongue piece portion and the flange portion, and a person ordinarily skilled in the art could have easily conceived of the idea that the stepped portion located between them only needs to be provided on the inner periphery of the roller portion 5.

However, even if the "bearing" itself is widely known not only as a beauty tool but also as a mechanism with general purposes, Different Feature 4' is not a simple "bearing" but is present for the specific structure of the bearing. The aforementioned allegation of Defendant of the first instance ignores this point and is unreasonable.

A target to be supported in the bearing in the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance is the roller portion 5 and more specifically, the large-diameter portion 54 having the cylindrical inner peripheral surface is supported. Therefore, the bearing used for the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance needs to be capable of supporting the cylindrical inner peripheral surface.

On the other hand, the bearing of the Exhibit Otsu 46 art has the elastic lock piece and the flange, does not have a shape capable of being attached to the large-diameter portion 54 of the roller portion 5 in the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, has a problem that the target is a plate material, has a function for locking the plate material, and is used for the application of locking the plate material. Moreover, the bearing of the Exhibit Otsu 47 art also has the inclined surface portion/tongue piece portion and the flange portion, does not have a shape capable of being attached to the large-diameter portion 54 of the roller portion 5 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, has a problem that the target is a thin plate, has a function for locking the thin plate, and is used for the application of locking the thin plate.

Therefore, the bearings of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, the Exhibit Otsu 46 art, and the Exhibit Otsu 47 art are different in terms of the problems, purposes, functions, and applications, there is no motivation for using the bearings of the Exhibit Otsu

46 art and the Exhibit Otsu 47 art as the bearing of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, and Different Feature 4' could not have been easily conceived of by a person ordinarily skilled in the art.

(c) Defendant of the first instance alleges that the Exhibit Otsu 164 does not limit a mounting target of a bush to the plate-shaped article, and by considering this point, the bearings described in the Exhibit Otsu 46 document and the Exhibit Otsu 47 document are not limited to the plate shaped articles.

However, whether the target of the bush in the Exhibit Otsu 164 is limited to the plate shaped article or not does not have any relation with whether or not the targets of the bearings in the Exhibit Otsu 46 document and the Exhibit Otsu 47 document are limited to the plate shaped articles, and what the bearings in the Exhibit Otsu 46 document and the Exhibit Otsu 47 document are targeted to fix should be determined on the basis of the descriptions in the documents.

E. Different Feature 5'

(a) As described in the aforementioned D, since there is no motivation itself for using the bearing in the Exhibit Otsu 46 art or in the Exhibit Otsu 47 art for the bearing of the large-diameter portion of the roller portion in the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, Different Feature 5' could not have been easily conceived of, either.

Moreover, Defendant of the first instance alleges that, by employing the projecting portion of the massage member of the Exhibit Otsu 44 art for the invention described in the Exhibit Otsu 45 document, mounting of the bearing of the Exhibit Otsu 46 art or the Exhibit Otsu 47 art to the roller portion 5 of the Exhibit Otsu 45 invention alleged by Defendant of the first instance could have been easily conceived of, but since the bearing 8 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance has the outer peripheral surface with the cylindrical shape and does not have the projecting portion, no motivation is obtained for employing the projecting portion of the Exhibit Otsu 44 art when the sliding bearing made of plastic is to be used.

(b) Defendant of the first instance alleges that the bearing of the Exhibit Otsu 46 art is to position the housing between the elastic lock piece and the flange and a person ordinarily skilled in the art could have easily conceived that the

stepped portion located between them only needs to be provided on the inner periphery of the roller portion 5, and the bearing of the Exhibit Otsu 47 art is to position the housing between the inclined surface portion and the flange portion or between the tongue piece portion and the flange portion and a person ordinarily skilled in the art could have easily conceived that the stepped portion located between them only needs to be provided on the inner periphery of the roller portion 5.

However, as described in the aforementioned D, since there is no motivation for applying the bearings in the Exhibit Otsu 46 art and the Exhibit Otsu 47 art for the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance, there is no motivation for employing the structure of providing the stepped portion capable of being engaged with the lock claw (the elastic lock piece of the Exhibit Otsu 46, the inclined surface portion and the tongue piece portion of the Exhibit Otsu 47) on the inner periphery of the roller portion 5 of the Exhibit Otsu 45 invention alleged by Plaintiff of the first instance.

5. Whether Present Patent 2 should be invalidated through a trial for patent invalidation (presence/absence of lack of inventive step with the Exhibit Otsu 135 document as the primarily cited reference) (issue (4)B)

[Allegation of Defendant of the first instance]

(1) Primarily cited reference

A. The Exhibit Otsu 135 document describes the following invention (hereinafter, referred to as the "Exhibit Otsu 135 invention alleged by Defendant of the first instance".)

"A roller for skin including support fitting 15, 150 fixed to a grip tool 13, a support shaft 16, 160, 161 mounted on the support fitting 15, 150, and a roller body 2, 103, 104 rotatably supported on a distal end side of the support shaft 16, 160, 161 and configured to give an esthetic action to the body by the roller body 2, 103, 104, in which the roller body 2, 103, 104 has a hole only on a base end side, the roller body 2, 103, 104 is supported by the support shaft 16, 160, 161 in a non-penetrating state where the distal end of the support shaft 16, 160, 161 is located inside thereof through a rotation rod 17, the rotation rod 17 is retained by the support shaft 16, 160, 161 at a distal end which is on a side opposite to the hole of the roller body 2, 103, 104, a flange 12 protrudes from the rotation rod 17, and the roller body 2,

103, 104 has an engagement hole 6 capable of being engaged with the flange 12 on an inner periphery."

B. The "grip tool 13" of the Exhibit Otsu 135 invention alleged by Defendant of the first instance corresponds to the "handle" in Present Invention 2, the "support shaft 16, 160, 161" to the "support shaft", the "roller body 2, 103, 104" to the "rotary body", the "roller for skin" to the "beauty instrument", and the "rotation rod 17" to the "bearing member".

(2) Common features and different features

The common features and different features between Present Invention 2 and the Exhibit Otsu 135 invention alleged by Defendant of the first instance are as follows.

A. Common Feature

The point that "a beauty instrument including a support shaft mounted on a handle and a rotary body rotatably supported on a distal end side of the support shaft and configured to give an esthetic action to the body by the rotary body, characterized in that the rotary body is supported by the support shaft through a bearing member in a state where the distal end of the support shaft is located inside thereof, the bearing member is retained by the support shaft at the distal end, a projecting portion protrudes from the bearing member, the rotary body has a stepped portion capable of being engaged with the projecting portion on an inner periphery, and the stepped portion is locked by the base end side of the projecting portion"

B. Different Features

(a) Different Feature 1

The bearing member in Present Invention 2 has the lock claw capable of elastic deformation and the flange portion provided on the base end side of the lock claw, and the lock claw has the slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, while the rotation rod 17 in the Exhibit Otsu 135 invention alleged by Defendant of the first instance has only the flange 12 protruding from the rod body 21 and does not have the lock claw having the slanted surface and capable of elastic deformation and the flange portion.

(b) Different Feature 2

The point that the rotary body in Present Invention 2 has the stepped portion capable of being engaged with the lock claw on the inner periphery, the stepped portion is locked on the base end side of the lock claw and is located between the lock claw and the flange portion, while the roller body 2, 103, 104 in the

Exhibit Otsu 135 invention alleged by Defendant of the first instance only has a stepped portion on the base end side of an engagement hole 6 capable of being engaged with the flange 12.

(c) Different Feature 3

The point that, in Present Invention 2, the support shaft is retained by/fixed to the handle, while in the Exhibit Otsu 135 invention alleged by Defendant of the first instance, the support shaft 16, 160, 161 is fixed to the grip tool 13 through the support fitting 15, 150.

(3) How the different features could have been easily conceived of

A. Different Feature 1

(a) U.S. Patent Application Publication No. 2010/191161 published on July 29, 2010 (Exhibit Otsu 194-1, hereinafter, referred to as the "Exhibit Otsu 194 document".) describes the following art (hereinafter, referred to as the "Exhibit Otsu 194 art").

"A plug 200, 220 for rotatably mounting a module 130, 140 for massaging the body around a lock pin 240, having a projection 205 capable of elastic deformation that protrudes and a flange 201 on the base end side of the projection 205, and the projection 205 having a slanted surface whose distance to a rotation center becomes smaller as it goes toward the distal end side."

"The module 130, 140 has a stepped portion capable of being engaged with the projection 205 on an inner periphery. The stepped portion is locked on the base end side of the projection 205 and is located between the projection 205 and the flange 201."

(b) Application of the Exhibit Otsu 194 art

a. The plug 200, 220 of the Exhibit Otsu 194 art is means for rotatably mounting the module 130, 140 for massaging the body around the lock pin 240, and the mounting means is in common with the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Defendant of the first instance in a point that it is a member for rotating the rotary body used for massaging around the support shaft and in a point that it is used for a non-penetrating rotary body.

Moreover, the Exhibit Otsu 135 document suggests that mounting means other than the rotation rod 17 may be used as a structure for rotatably mounting the roller 1 to the rotation shaft 11 (page 4, upper right column, lines 2 to 4).

Furthermore, the Exhibit Otsu 135 document describes that the roller 1 can be rotatably mounted without projecting the flange 12 (page 4, upper left column, line 8 to upper right column, line 1).

Therefore, to employ the structure of the mounting means of the Exhibit Otsu 194 art for the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Defendant of

the first instance so as to have the projection 205 and the flange 201 capable of elastic deformation of the Exhibit Otsu 194 art is easy for a person ordinarily skilled in the art.

b. Plaintiff of the first instance alleges that the plug 200, 220 of the Exhibit Otsu 194 art does not function as a bearing member and that the lock pin 240 does not function as a rotation shaft.

However, paragraph [0155] in the Exhibit Otsu 194 document has the description that "the latch arm 204 and the latch recess portion are capable of preventing unintentional withdrawal of the plug 200 from the opening, but the plug 200 can be still rotated with respect to the opening even if the latch arm 204 and the latch recess portion are meshed with each other." and paragraph [0166] has the description that "the diameter of the first portion 242 in the shaft 241 of the lock pin 240 is slightly smaller than the diameter of the opening extending through the modules 100, 120, 130, and 140 and the plugs 154, 200, 210, 220, and 230 and thus, the shaft 241 can be inserted through those openings.", respectively and thus, it is obvious for a person ordinarily skilled in the art that the plug 200, 220 functions as the bearing member, and the lock pin 240 as the rotation shaft.

Therefore, the aforementioned allegation of Plaintiff of the first instance has no grounds.

c. Plaintiff of the first instance alleges that when the rotation rod 17 supported by the support shaft 16 described in the Exhibit Otsu 135 document is replaced with the plug 200, 220, the support shaft 16 is brought into a state inserted into the plug 200, 220, whereby inward movement of the latch arm 204 is fixed so as to prevent removal of the latch arm 204 of the plug 200, 220 from the latch recess portion similarly to the case where the lock pin 240 is inserted, and the latch arm 204 does not make sense when the roller body 2, 103, 104 is to be attached.

However, as described in the Exhibit Otsu 135 document that "the support shaft 16 is integrally formed by drilling an annular engagement groove 20 in a distal end portion 19 of a shaft body 18 made by an outer diameter smaller than an inner diameter of the rotation rod 17, and the rotation rod 17 is formed by providing three pieces of elastic pieces 22 by drilling three long grooves 23 (only one of the long grooves is illustrated in Figure 3) at positions dividing a space in an outer circumferential direction into three equal parts on the hollow-state rod body 21 having an inner diameter larger than the outer diameter of the support shaft 16 and on the distal end portion side of this rod body 21 toward a rear end portion side where the flange 12 is projected and moreover, an engagement projection 24 engaged with the engagement groove 20 of the support shaft 16 is projected inside the distal end of each of the elastic pieces 22." (page 3, upper left

column, line 17 to upper right column, line 9), since the diameter of the support shaft 16 is smaller than the inner diameter of the rotation rod 17, a clearance is found between the support shaft 16 and the rotation rod 17, and even if the plug 200, 220 is applied, the latch arm 204 can move inward due to the presence of this clearance.

Therefore, the aforementioned allegation of Plaintiff of the first instance has no grounds.

d. Plaintiff of the first instance alleges that there is no need to make the latch arm 204 capable of elastic deformation if the latch arm 204 is configured harder than the roller 1, 101, 102 and by employing the "structure which makes the latch arm 204 having the projection 205 capable of elastic deformation" in the Exhibit Otsu 194 document for the rotation rod 17 in the Exhibit Otsu 135 document, elasticity of the latch arm 204 needs to be configured softer (easier to be deformed) than the roller 1, 101, 102 and then, when a load in a removing direction acts on the roller 1, 101, 102, the latch arm 204 is easily deformed, or the stepped portion (portion locked by the projection 205) of the roller 1, 101, 102 itself is also elastically deformed, the roller 1, 101, 102 easily rides over the projection 205 and is removed from the rotation rod 17.

However, when the roller 1 is deformed and then, the latch arm 204 is elastically deformed, mounting of the roller 1 is made easier and thus, it cannot be said that it is not necessary that the latch arm 204 has to be made capable of elastic deformation if the roller 1 is deformed. Moreover, if the roller 1, 101, 102 is deformed, the roller 1, 101, 102 is engaged with the latch arm 204 regardless of hardness of the latch arm 204 and thus, there is no need to configure the latch arm 204 softer (easier to be deformed) than the roller 1, 101, 102. Furthermore, whether or not the roller 1, 101, 102 is removed from the rotation rod 17 exclusively depends on a degree of a shape change of the roller 1, 101, 102 or friction or fitting between the roller 1, 101, 102 and the rotation rod 17 and thus, it does not mean that the roller 1, 101, 102 is removed from the rotation rod 17 by a change in the shape.

Therefore, the aforementioned allegation of Plaintiff of the first instance has no grounds.

e. Plaintiff of the first instance alleges that, by forming a structure which enables elastic deformation of the latch arm 204 having the projection 205, costs increase, which makes a hindrance.

However, a case where the cost increase makes the hindrance is when the cost remarkably increases, and a person ordinarily skilled in the art would not employ a specific structure, but since the plug 200, 220 is a resin-molded product, a product unit price does not rise extremely as compared with the rotation rod 17.

B. Different Feature 2

As described in the aforementioned A, to apply the projection 205 capable of elastic deformation and the flange 201 of the Exhibit Otsu 194 art to the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Defendant of the first instance by employing the structure of the mounting means in the Exhibit Otsu 194 art is easy for a person ordinarily skilled in the art, but since the Exhibit Otsu 194 document discloses the stepped portion capable of being engaged with the projection 205 on the inner periphery of the module 130, 140, when the Exhibit Otsu 194 art is to be applied to the Exhibit Otsu 135 invention alleged by Defendant of the first instance, there is motivation to provide the stepped portion of the Exhibit Otsu 194 art on the inner periphery of the roller body 2, 103, 104 of the Exhibit Otsu 135 invention alleged by Defendant of the first instance.

Moreover, replacement of the stepped portion provided in the Exhibit Otsu 135 invention alleged by Defendant of the first instance with the stepped portion of the Exhibit Otsu 194 art is only replacement of the engagement hole 6 of the Exhibit Otsu 135 invention alleged by Defendant of the first instance with the one suitable for the size of the projection 205 of the Exhibit Otsu 194 art, and there is no particular hindrance in this.

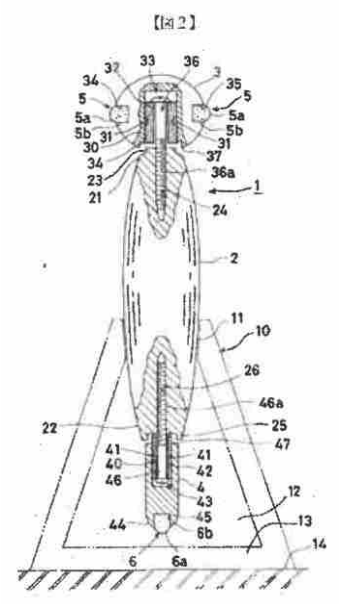
Therefore, to apply the Exhibit Otsu 194 art to the Exhibit Otsu 135 invention alleged by Defendant of the first instance so as to have the structure according to the Different Feature 2 is easy for a person ordinarily skilled in the art.

C. Different Feature 3

(a) Registered Utility Model No. 3036898 published on May 6, 1997 (Exhibit Otsu 136, hereinafter, referred to as the "Exhibit Otsu 136 document") describes the following art (hereinafter, referred to as the "Exhibit Otsu 136 art"). (Figures of the working example of the Exhibit Otsu 136 document are illustrated below.)

"A pressure-point healthcare tool in which a head portion 3 is rotatably supported by a tapping screw 36 by screwing the head portion 3 with a barrel portion 2 by the tapping screw 36 and by retaining/fixing the tapping screw 36"

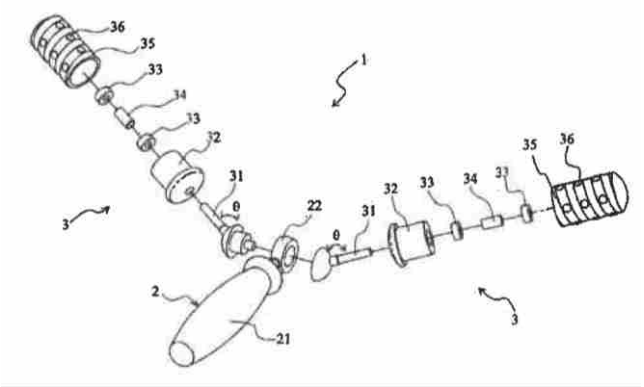
[Figure 2]



(b) Registered Utility Model No. 3166202 published on February 24, 2011 (Exhibit Otsu 193, hereinafter, referred to as the "Exhibit Otsu 193 document") describes the following art (hereinafter, referred to as the "Exhibit Otsu 193 art"). (Figures of the working example of the Exhibit Otsu 193 document are illustrated below.)

"A massage roller in which a roller 3 is rotatably supported by a connection component 31 by retaining/fixing the connection component 31 to a spherical head 22 on one end of a handle 2"

[Figure 2]

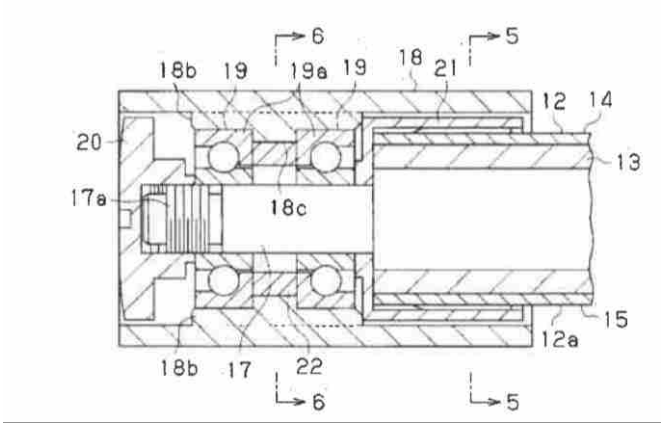


(c) International Publication No. 2011/004627 (Exhibit Otsu 137, hereinafter, referred to as the "Exhibit Otsu 137 document") describes the following art (hereinafter, referred to as the "Exhibit Otsu 137 art"). (Figures of the working example of the

Exhibit Otsu 137 document are illustrated below.)

"A beauty instrument in which a roller support shaft 17 is fitted in and retained/fixed in a space formed in a bifurcated portion 12a of a handle 12, and a roller 18 is rotatably supported by the roller support shaft 17."

[Figure 4]



(d) Application of the Exhibit Otsu 136 art, the Exhibit Otsu 193 art, and the Exhibit Otsu 137 art

The Exhibit Otsu 135 document describes that “other publicly-known structures which can rotatably support the roller 1 can be employed for the grip portion (page 3, lower right column", and the Exhibit Otsu 135 invention alleged by Defendant of the first instance has common technical matters with the Exhibit Otsu 136 art, the Exhibit Otsu 193 art, and the Exhibit Otsu 137 art and thus, there is motivation to apply any one of the Exhibit Otsu 136 art, the Exhibit Otsu 193 art, and the Exhibit Otsu 137 art to the Exhibit Otsu 135 invention alleged by Defendant of the first instance, and there is no hindrance in that.

Therefore, it is easy to retain/fix the support shaft 16, 160, 161 in the Exhibit Otsu 135 invention alleged by Defendant of the first instance to the grip tool 13 by applying any one of the Exhibit Otsu 136 art, the Exhibit Otsu 193 art, and the Exhibit Otsu 137 art to the Exhibit Otsu 135 invention alleged by Defendant of the first instance.

D. As described above, since Different Features 1 to 3 could have been easily conceived of by applying each of the aforementioned arts, inventive step is not found in Present Invention 2.

[Allegation of Plaintiff of first instance]

(1) The Exhibit Otsu 135 document describes the following invention (hereinafter, referred to as the "Exhibit Otsu 135 invention alleged by Plaintiff of the first instance").

"A roller for skin including a support shaft 16, 160, 161 supported by a support fitting 15, 150 on a base end and a roller 1, 101, 102 rotatably supported by the support shaft 16, 160, 161 and configured to give washing and massaging effects to the body by the roller 1, 101, 102, in which the roller 1, 101, 102 has an insertion port 4 only on the base end side, the roller 1, 101, 102 is supported by the support shaft 16, 160, 161 through a rotation rod 17 in a non-penetrating state where a distal end of the support shaft 16, 160, 161 is located inside thereof, the rotation rod 17 is retained by the support shaft 16, 160, 161 at a distal end which is on a side opposite to the insertion port 4 of the roller 1, 101, 102, a flange 12 protrudes from the rotation rod 17, the roller 1, 101, 102 is capable of elastic deformation and has a stepped portion capable of being engaged with the flange 12 on an inner periphery thereof, and the stepped portion is locked on the base end side of the flange 12"

(2) Different Features between Present Invention 2 and the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance

Different Features between Present Invention 2 and the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance are as follows.

A. Different Feature 1' (corresponding to Different Features 1 and 2)

A point in which, in Present Invention 2, the lock claw capable of elastic deformation protrudes from the bearing member, the bearing member has the flange portion on the base end side of the lock claw, the lock claw has a slanted surface whose distance to a rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, and the stepped portion of the rotary body is locked on the base end side of the lock claw and is located between the lock claw and the flange portion, while in the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, only the flange 12 protrudes from the rotation rod 17, it is unclear whether or not the flange 12 is capable of elastic deformation, and the stepped portion of the roller 1, 101, 102 capable of elastic deformation is only locked on the base end side of the flange 12.

B. Different Feature 3'

In a point in which, in Present Invention 2, the support shaft is retained by/fixed to the handle, while in the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, the support shaft 16, 160, 161 is supported by the support fitting 15, 150 and is not retained by/fixed to the grip tool 13 (handle).

(3) How the Different Features could have been easily conceived of

A. Different Feature 1'

(a) No motivation

a. The "lock pin 240" and the "plug 200, 220" described in the Exhibit Otsu 194

document do not correspond to the "support shaft" and the "bearing" in Present Invention 2.

And the plug 200, 220 described in the Exhibit Otsu 194 document is for fixing the two modules and is not the one functioning as a bearing member rotatably supporting the rotary body with respect to the shaft by being interposed between the shaft and the rotary body and thus, there is no motivation for the rotation rod 17 disposed between the support shaft 16 and the roller body 2, 102, 104 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance and functioning as the bearing member to be replaced with the plug 200, 220.

Moreover, even if the rotation rod 17 supported by the support shaft 16 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance is replaced with the plug 200, 220, a state in which the support shaft 16 is inserted into the plug 200, 220 is brought about, whereby inward movement of the latch arm 204 is fixed so as to prevent removal of the latch arm 204 of the plug 200, 220 from the latch recess portion similarly to the case in which the lock pin 240 is inserted, and the latch arm 204 no longer make senses when the roller body 2, 103, 104 is to be attached.

Therefore, there is no motivation to replace the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance with the plug 200, 220 having the latch arm 204 described in the Exhibit Otsu 194 document having a complicated structure as compared with the flange 12 of the rotation rod 17.

b. In the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, it is indispensable for the roller 1, 101, 102 itself to be capable of elastic deformation and thus, the roller 1, 101, 102 can be locked by the flange 12 of the rotation rod 17 by using elasticity of the roller 1, 101, 102 without deformation of the flange 12 of the rotation rod 17.

On the other hand, in the Exhibit Otsu 194 art, since the module 130, 140 is not deformed at locking between the module 130, 140 and the plug 200, 220, the latch arm 204 having the projection 205 locked by this is configured to be capable of elastic deformation.

Therefore, there is no motivation to apply the structure of the latch arm 204 having the projection 205 capable of elastic deformation disclosed in the Exhibit Otsu 194 document as the structure for locking it by the roller 1, 101, 102 capable of elastic deformation of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance.

(b) Presence of hindrance

a. If the "structure which makes the latch arm 204 having the projection 205 capable of elastic deformation" described in the Exhibit Otsu 194 document is employed for the

rotation rod 17 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, the elasticity of the latch arm 204 needs to be configured softer (easier to deform) than the roller 1, 101, 102. That is because, if the elasticity of the latch arm 204 is configured harder (harder to deform) than the roller 1, 101, 102, when the latch arm 204 is brought into contact with the roller 1, 101, 102, the roller 1, 101, 102 is deformed, and it does not make sense to configure the latch arm 204 capable of elastic deformation.

However, it is indispensable for the roller 1, 101, 102 itself of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance to be capable of elastic deformation, and moreover, the elasticity is approximately of a degree that the recess portion 3 for a suction cup formed on a surface of the roller is adsorbed by the skin (page 4, upper right column, line 4 to the last line in the Exhibit Otsu 135 document) and thus, it is soft to such a degree that it is deformed with respect to the skin. Even if the latch arm 204 which is softer (easier to deform) than this roller 1, 101, 102 is provided in the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, when a load in the removing direction acts on the roller 1, 101, 102, the latch arm 204 is elastically deformed easily, or the stepped portion (portion locked by the projection 205) of the roller 1, 101, 102 itself is also elastically deformed, and the roller 1, 101, 102 easily rides over the projection 205 and is removed from the rotation rod 17.

b. The roller 1, 101, 102 is made of an elastic material, and when this is attached to the rotation rod 17, it is pushed open and deformed to such a degree that does not interfere with the flange 12 and thus, when the roller 1, 101, 102 in an attached state is pulled, it is considered that the stepped portion of the roller 1, 101, 102 can be deformed in accordance with the shape of the engagement portion.

When the latch arm 204 described in the Exhibit Otsu 194 document is used for this, the stepped portion of the roller 1, 101, 102 acts so as to press the projection 205 of the latch arm 204 inward in the radial direction due to the deformation as above, which causes a concern of disengagement.

Moreover, the flange 12 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance is continuous over the entire circumference in the circumferential direction, while the latch arm 204 described in the Exhibit Otsu 194 document can be only provided in plural in the circumferential direction and is not continuous over the entire circumference and thus, a tensile force applied to the roller 1, 101, 102 is concentrated only at the spot of the latch arm 204, and it is considered that the stepped portion can be deformed at the spot more easily than in the case where the flange 12 is provided over the entire circumference.

Moreover, in order to provide the "structure which enables elastic deformation of

the latch arm 204 having the projection 205" on the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, molding separately from the rotation rod 17 is needed so as to enable elastic deformation of the latch arm 204, and the material, thickness, shape, and the like of the latch arm 204 according to the resin need to be considered to have a predetermined elastic force. Then, it is obvious that a cost for forming the structure which enables elastic deformation of the latch arm 204 having the projection 205 rises.

c. As described above, even if the "structure which enables elastic deformation of the latch arm 204 having the projection 205" described in the Exhibit Otsu 194 document is provided on the rotation rod 17 of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance, the locking function is not exerted, and the cost rises and thus, there is a hindrance in application of the art described in the Exhibit Otsu 194 document to the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance.

B. Different Feature 3'

The Exhibit Otsu 135 invention alleged by Plaintiff of the first instance has the structure "including the support shaft 16, 160, 161 supported by the support fitting 15, 150 on the base end and the roller 1, 101, 102 rotatably supported by the support shaft 16, 160, 161".

Here, the technical meaning that the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance provides the "support fitting 15, 150" and the "support shaft 16" is that, as illustrated in Figure 1 of the Exhibit Otsu 135 document, the rotation shaft 11 extending from the grip portion 13 is formed having a crank shape, and metal is suitable as a material which can ensure elasticity and strength, while a resin is suitable as a material for the support shaft 16, since a distal end portion for retaining is integrally formed.

On the other hand, the Exhibit Otsu 193 art, the Exhibit Otsu 136 art, and the Exhibit Otsu 137 art do not have such technical meaning and thus, there is no motivation to have the structure in which the "support shaft 16, 160, 161" of the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance is retained by/fixed to the grip portion on the basis of these arts so as to have the structure of Present Invention 2 related to Different Feature 3'.

Therefore, a person ordinarily skilled in the art could not have easily conceived of having the structure of Present Invention 2 related to Different Feature 3' from the Exhibit Otsu 135 invention alleged by Plaintiff of the first instance on the basis of any one of the Exhibit Otsu 193 art, the Exhibit Otsu 136 art, and the Exhibit Otsu 137 art.

6. Amount of damages of Plaintiff of the first instance (issue (5))

The description in No. 3, 5 in "Facts and reasons" of the judgment in the first instance shall be cited as it is, except that the amendment was made as in (1) below and the allegation in this court was added as in (2) below.

(1) Amendment

A. The phrase "the date of registration of Present Patent 2 (December 4, 2015) and after) " on page 39, line 21 in the judgment in prior instance shall be revised to "a period from December 4, 2015 to May 8, 2017".

B. The term "Present Patent 2" on page 40, line 7 of the judgment in prior instance shall be revised to "Present Patent 1 and Present Patent 2".

C. The phrase "a period from December 4, 2015 to May 8, 2017" shall be added at the beginning on page 41, line 11 in the judgment in prior instance, and "a tort of patent right infringement during a period from December 4, 2015 to May 8, 2017" next to the phrase "to Defendant," on line 25, respectively.

(2) Allegation in this court

[Allegation of Plaintiff of first instance]

A. Plaintiff of the first instance sold Plaintiff's Product (Exhibit Ko 23) in February 2009 and after, and Plaintiff's Product has the following structure and is a worked product of Present Invention 1 and Present Invention 2.

(a) Structure of Plaintiff's product in relation with Present Invention 1

a. A beauty instrument in which a pair of balls is supported on a distal end portion of a handle at an interval from each other and rotatably around one axis, respectively (Exhibit Ko 23).

b. The axis of the ball is configured to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle with respect to a skin surface during a reciprocating operation (Exhibit Ko 47).

c. An opening angle of a pair of ball support shafts is 70 degrees, and an interval between outer peripheral surfaces of the pair of balls is 11.2 mm (Exhibit Ko 47).

d. The ball is supported by the ball support shaft through a bearing member in a non-penetrating state (Exhibit Ko 24).

e. It is configured such that the skin is picked up by pressing the outer peripheral surface of the ball to the skin and by moving it from a distal end to the base end direction of the handle (Exhibit Ko 23).

(b) Structure of Plaintiff's Product in relation with Present Invention 2 (Exhibit Ko 24)

a. A beauty instrument including a support shaft retained by/fixed to a handle

on a base end and a rotary body rotatably supported on the distal end side of the support shaft and configured to give an esthetic action to the body by the rotary body.

b. The rotary body has a hole only on the base end side and is supported by the support shaft through the bearing member in a non-penetrating state where the distal end of the support shaft is located inside thereof.

c. This bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body, a lock claw capable of elastic deformation protrudes from the bearing member, and the bearing member has a flange portion on the base end side of the lock claw.

d. The lock claw has a slanted surface whose distance to a rotation center of the rotary body in the bearing member becomes smaller as it goes toward the base end side.

e. The rotary body has a stepped portion capable of being engaged with the lock claw on the inner periphery, and this stepped portion is locked on the base end side of the lock claw and is located between the lock claw and the flange portion.

B. Defendant of the first instance sold 351,724 units of Defendant's Product in total during a period from December 4, 2015 to May 8, 2017, and a profit per a unit quantity of Plaintiff's Product in the period was 5,547 yen, which is as found in the judgment in prior instance.

The contribution rates of Present Patent Right 1 and Present Patent Right 2 to the sales were 100%, and in this case, there are no "circumstances due to which they would have been unable to sell" in the proviso to Article 102, paragraph (1) of the Patent Act.

Therefore, the amount of damages of Plaintiff of the first instance in pursuant to Article 102, paragraph (1) of the Patent Act is 1,951,013,028 yen (351,724 units × 5,547 yen = 1,951,013,028 yen). Plaintiff claimed 500,000,000 yen in that (Plaintiff claimed 300,000,000 yen in the court of prior instance but expanded to 500,000,000 yen in this court).

C. The judgment in prior instance acknowledged the amount of damages for the damage related to the infringement of Present Patent Right 2 after the amount of 90% was reduced from the contribution rate but did not judge presence/absence of the infringement and the amount of damages for Present Patent Right 1.

However, if the amount is reduced by the contribution rate in the acknowledgement of the amount of damages related to the infringement of Present Patent Right 2, the

contribution rate of Present Patent Right 1 should be also acknowledged, and the contribution rate should be added to the contribution rate of Present Patent Right 2 with the limit of 100% in the acknowledgement of the amount of damages.

And the patent art of Present Invention 1 is an art related to the inclination of the handle portion in the beauty instrument, the opening angle of the pair of balls, and the interval between the outer peripheral surfaces of the pair balls, and a user can reciprocate it without a need of bending the wrist when the user grips the handle and presses the pair of balls to the skin by the art, and it is so configured that the skin is picked up by pressing the outer peripheral surface of the ball to the skin and by moving it from the distal end to the base end side of the handle by the opening angle between the pair of balls and the interval thereof, and it largely contributes to the handle, balls, and the entire beauty instrument and thus, the contribution rate of Present Patent Right 1 to the sales of the product is found to be 100%.

Even if the amount is reduced by the contribution rate for Present Patent Right 1 and Present Patent Right 2, the contribution rates of the two patent rights should exceed 80%.

D. Allegation of Defendant of the first instance

(a) Contribution rate

Defendant of the first instance alleges that the contribution rate of Present Invention 2 is 0% for the reasons that the worked portion of Present Invention 2 is not seen by a consumer, that the effect such as smoothness of rotation of the roller which is the effect of Present Invention 2 is not appealed to the consumer, and that there is an alternative art.

However, the contribution rate of Present Invention 2 is determined by the technical meaning of Present Invention 2, and whether or not it is seen by the consumer does not matter, and since Present Invention 2 is an art related to the bearing and it smoothens the rotation of the roller, it has the technical meaning in the entire product.

(b) Circumstances due to which they would have been unable to sell

a. Defendant of the first instance alleges as the circumstances due to which they would have been unable to sell that sales channels are different between Plaintiff's Product and Defendant's Product and effects are different.

However, since Plaintiff's Product and Defendant's Product are currently competing and used as targets of comparison/examination by the consumers and selected (Exhibits Ko 35, 36), the circumstances alleged by Defendant of the first instance cannot be considered to be the

circumstances due to which they would have been unable to sell.

Moreover, the effect of the microcurrent is a fact having no relations with Present Invention 2.

b. Defendant of the first instance alleges that, since there are 30 kinds of products competing with Plaintiff's Product, the consumer can select a product having the effect similar to that of Plaintiff's Product from at least 30 kinds of products.

However, it is not obvious whether the competing products pointed out by Defendant of the first instance exert the function and effect of Present Invention 2.

Moreover, even if there is an alternative product for Plaintiff's Product other than Defendant's Product in the market, Defendant's Product could be sold regardless of the presence of such alternative products and thus, it should be considered that Plaintiff of the first instance could have also sold Plaintiff's Product in the same quantity as them.

[Allegation of Defendant of first instance]

A. Contribution rate

By considering the circumstances below, the contribution rate of Present Invention 2 to the sales of Defendant's product should be considered to be 0.

(a) In Defendant's Product, the bearing which is the worked portion of Present Invention 2 is not seen by the consumer.

Moreover, in Plaintiff's product, a function for preventing removal of the roller is not sufficient, and Plaintiff of the first instance does not appeal to the consumers the effects of the smoothness of the roller rotation, prevention of removal of the roller from the support shaft, and the like which are the effects of Present Invention 2 in the sales of Plaintiff's Product, and Defendant of the first instance does not appeal the aforementioned effects, either, in the sales of Defendant's Product.

(b) The bearing is a member for supporting the shaft and causing to perform a smooth rotary motion and a basic and general-purpose member described even in a basic mechanical engineering textbook (Exhibits Otsu 56 to 58), and when the rotary body is used in the beauty instrument, when the rotary body is rotated around the support shaft, use of the bearing itself is an extremely natural matter for a person ordinarily skilled in the art.

And technical elements of Present Invention 2 are [i] the rotary body is non-penetrating; [ii] the rotary body is hard; and [iii] a distal end of the support shaft is

present inside the rotary body, and there are a large number of such arts (Exhibits Otsu 45, 64, 65, 136).

B. Circumstances due to which they would have been unable to sell

In this case, there is the "circumstances due to which they would have been unable to sell" in the proviso to Article 102, paragraph (1) of the Patent Act as follows.

(a) Difference in sales channel

Plaintiff's Product is sold mainly at major mail-order companies, department stores, major electronics retail stores, and online malls by Plaintiff (Exhibits Otsu 94 to 110), while Defendant's Product mainly deals with wholesale to large-scale discount shops and variety shops (Exhibits Otsu 85 to 93), and those who purchase expensive goods handled at the major mail-order companies, department stores, major electronics retail stores, and the like do not purchase competing products sold at lower prices at the large discount shops and variety shops and moreover, those who purchase inexpensive goods at the large discount shops and variety shops do not purchase competing products sold at higher prices at the major mail-order companies, department stores, major electronics retail stores, and the like.

Particularly, Plaintiff's Product is an expensive beauty instrument advertising slimming effects of the whole body mainly for female targets (Exhibit Ko 16), and women who examine purchase of Plaintiff's Product by expecting such effects would not replace it by purchase of an inexpensive Defendant's Product.

(b) Difference in effects

Plaintiff's Product has an effect of causing a microcurrent generated by a solar panel to electrify the body through the roller, which Defendant's Product does not have (Exhibits Otsu 111 to 115).

Those who purchase Plaintiff's Product select Plaintiff's Product by expecting an esthetic effect of this microcurrent, and those who select the goods by expecting the esthetic effect by the microcurrent would not usually select Defendant's Product without any effect of the microcurrent.

(c) Presence of competing products

As a beauty roller having an effect similar to that of Plaintiff's product, at least 24 competing companies including Defendant of the first instance sell as many as 29 kinds of products (Exhibit Otsu 176), and the consumers can select a product having an effect similar to that of Plaintiff's Product from at least 30 kinds of products including Plaintiff's Product.

On this point, Plaintiff of the first instance alleges that it is unclear whether the bearing of an article similar to the aforementioned Plaintiff's Product has an effect

similar to that of the Present Invention 2.

However, if the bearing of the aforementioned similar article rotatably supports the roller, it has a function and effect similar to those of Present Invention 2, and there is no product in the aforementioned similar articles in which the roller is not rotated, and any of them is considered to have a function and effect similar to those of Present Invention 2.

No. 4 Judgment of this court

1. Descriptions in Present Description 1 and Present Description 2

(1) Present Description 1 has the following description (Exhibits Ko 2, 53)

[Technical Field] [0001] This invention relates to a beauty instrument which can realize beautiful skin by promoting a blood flow by massaging the skin of the face, the arm, and the like by a ball for massaging provided on a handle.

[Background Art] [0002] Conventionally, this type of beauty instrument has been proposed in various ways, and a skin beautifying roller is disclosed in Patent Document 1, for example. That is, this skin beautifying roller includes a handle and a pair of rollers provided on one end of the handle, and a rotation shaft of the roller is set so that the rotation shaft of the roller forms a sharp angle with a center line in a long axis direction of the handle. Moreover, an angle formed by the rotation shafts of the pair of rollers is set to form a non-sharp angle. By gripping the handle of this skin beautifying roller by the hand and by pressing the roller in one direction to the skin, the skin is pulled and pores are opened, and by pulling it to an opposite direction while pressing it, the skin is sandwiched between the rollers, and the pores are contracted. Therefore, according to this skin beautifying roller, dirt in the pores can be removed efficiently.

[Problems to be Solved by the Invention] [0004] However, with the skin beautifying roller with the conventional structure described in Patent Document 1, since the center line of the handle and the rotation shafts of the both rollers are on the same plane (see Figure 2 in Patent Document 1), when the handle of the skin beautifying roller is gripped by the hand, and both rollers are pressed onto the skin, the elbow should be raised, and the wrist should be bent so as to direct the tips of the hand to the skin side so as to stand the handle upright with respect to the skin. Thus, operability of the skin beautifying roller is poor and moreover, an acting state of the roller to the skin is greatly changed by a wrist angle, which is a problem.

[0005] Moreover, since each of the rollers of this skin beautifying roller is formed having an oval cylindrical shape, when the roller is pressed in one direction, a wide part

of the skin is evenly pressed and thus, the pores cannot be opened sufficiently. Furthermore, when the roller is pulled to the opposite direction, the skin located between the both rollers is pulled in a region corresponding to the length of the roller and cannot be strongly sandwiched by the two rollers. As a result, opening and contraction of the pores are not performed sufficiently, and dirt in the pores cannot be cleanly removed, which is a problem. In addition, since the roller is formed having an oval cylindrical shape, it is brought into linear contact with the skin, resistance against the skin is large, movement is not smooth, and moreover, a moving direction is limited easily. Therefore, there is a problem that operability of the skin beautifying roller is poor.

[0006] This invention was made in view of such problems present in the prior arts and has an object to provide a beauty instrument which can exert an excellent massaging effect to the skin, can exert the pressing effect and the picking-up effect to the skin markedly and continuously, and has favorable operability.

[Means for Solving the Problems] [0007] In order to achieve the aforementioned object, an invention of a beauty instrument described in Claim 1 is characterized in that, in a beauty instrument in which a pair of balls is supported rotatably around one axis, respectively, at a distal end portion of a handle at an interval from each other, the axis of the ball is configured to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle to the skin surface during a reciprocating operation, an opening angle of the pair of ball support shafts is set to 65 to 80 degrees, an interval between outer peripheral surfaces of the pair of balls is set to 10 to 13 mm, the ball is supported by the ball support shaft through a bearing member in a non-penetrating state, and the skin is picked up by pressing the outer peripheral surface of the ball to the skin and by moving it from the distal end of the handle to a base end direction.

[Advantageous Effect of the Invention] [0008] According to the beauty instrument of the present invention, the following effects can be exerted.

The beauty instrument described in Claim 1 is configured such that a pair of balls is supported rotatably around one axis, respectively, at a distal end portion of a handle at an interval from each other, and the axis of the ball is inclined forward with respect to a center line of the handle. That is, it is configured such that the axis of the ball can maintain a certain angle to the skin surface during a reciprocating operation of the beauty instrument. Thus, when the handle is gripped, and the pair of balls is applied to the skin, there is no need to bend the wrist, but the skin can be pressed in a state where the wrist is kept straight when the beauty instrument is moved forward, and the

skin can be picked up when the beauty instrument is moved backward.

[0009] Moreover, the portion in contact with the skin is not a cylindrical roller but is configured by a completely circular ball and thus, the ball is locally brought into contact with the skin. Therefore, the ball can cause a pressing force or a picking-up force to act concentrically on a local part of the skin, the movement of the ball to the skin can be made smooth, and a degree of freedom in a moving direction is high.

[0010] Thus, according to the beauty instrument of the present invention, an excellent massaging effect can be exerted to the skin and at the same time, the pressing effect and the picking-up effect to the skin can be exerted markedly and continuously, and the effect that the operability is favorable can be also exerted.

[0012] An embodiment of the beauty instrument which embodies this invention will be described below in accordance with Figures 1 to 7.

As illustrated in Figure 1, a bifurcated portion 11a extending having a Y-shape on a plane is provided at a distal end of a handle 11 constituting a beauty instrument 10 of this embodiment. ...

[0013] As illustrated in Figure 7, a pair of support cylinders 16 is integrally formed on a base material 12 in the bifurcated portion 11a of the handle 11, and a ball support shaft 15 made of metal is supported by this support cylinder 16. ...

[0014] A cylindrical bearing member 19 made of a synthetic resin and plated with metal on inner and outer peripheries is fitted with a projecting end portion of the ball support shaft 15 and is retained/fixed by a stop ring 25. On the outer periphery of this bearing member 19, a pair of elastically deformable lock claw 19a is projected. On the bearing member 19 on the ball support shaft 15, a ball 17 having a spherical shape is rotatably inserted/supported. ...

[0018] The beauty instrument 10 of this embodiment can be applied to the face as described above and can be also applied to the body such as the neck, arm, leg, and the like other than that.

As illustrated in Figure 3, the axis of the ball support shaft 15 is configured to be inclined forward to a center line x of the handle 11 so that the axis of the ball support shaft 15 can maintain a certain angle to the skin 20 surface during a reciprocating operation of the beauty instrument 10. Specifically, a side projection angle α of the axis y of the ball 17; that is, the axis y of the ball support shaft 15 to the center line (a line in parallel with a line dividing an angle between outer peripheral tangents z of a thickest portion of the handle 11 into two parts) x of the handle 11 is preferably 90 to 110 degrees so that the ball 17 is inclined forward to the center line x of the handle 11 so as to make operability favorable. This side projection angle α is more preferably

93 to 100 degrees and most preferably 95 to 99 degrees. If this side projection angle α is smaller than 90 degrees or larger than 110 degrees, the forward inclination angle of the ball support shaft 15 becomes too small or too large, and the elbow needs to be stood upright or lowered or the wrist needs to be bent greatly when the ball 17 is to be applied to the skin 20, which makes operability of the beauty instrument 10 poorer or makes adjustment of the angle of the ball support shaft 15 to the skin 20 surface difficult.

[0019] As illustrated in Figure 5, the opening angle of the pair of balls 17; that is, the opening angle β of the pair of ball support shafts 15, is set preferably to 50 to 110 degrees, more preferably to 50 to 90 degrees, or particularly preferably to 65 to 80 degrees in order that the pressing effect and the picking-up effect to the skin 20 by the reciprocating operation of the balls 17 are expressed favorably. If this opening angle β falls below 50 degrees, the picking-up effect to the skin 20 tends to act too strongly, which is not preferable. On the other hand, if the opening degree β exceeds 110 degrees, it becomes difficult to pick up the skin 20 located between the balls 17, which is not preferable.

[0020] Moreover, a diameter L of each of the balls 17 is preferably set to 15 to 60 mm, more preferably to 32 to 55 mm, particularly preferably to 38 to 45 mm in order that the beauty instrument 10 is applied mainly to the face and the arm. If the diameter L of the ball 17 is smaller than 15 mm, a range of the skin 20 where the pressing effect and the picking-up effect can be expressed becomes smaller, which is not preferable. On the other hand, if the diameter L of the ball 17 is larger than 60 mm, the size of the ball 17 is relatively larger than the size of the face or the arm and thus, it is difficult to press or pick up a narrow portion, which makes use difficult.

[0021] Moreover, an interval D between the outer peripheral surfaces of the balls 17 is preferably 8 to 25 mm, more preferably 9 to 15 mm, particularly preferably 10 to 13 mm, particularly in order that the picking up of the skin 20 is performed appropriately. If the interval D between the outer peripheral surfaces of the balls 17 is less than 8 mm, the picking-up effect acts too strongly to the skin 20 located between the balls 17, which is not preferable. On the other hand, if the interval D between the outer peripheral surfaces of the balls 17 exceeds 25 mm, it becomes difficult to pick up the skin 20 located between the balls 17, which is not preferable.

[0022] Subsequently, the action of the beauty instrument 10 in the embodiment configured as above will be described.

When this beauty instrument 10 is in use, as illustrated in Figure 3, in a state where a user grips the handle 11, when the user presses the outer peripheral surface of the ball 17 to the skin 20 of the face, the arm, and the like as indicated by a two-dot chain line

in Figure 3 and moves it forward it from the base end of the handle 11 to the distal end direction (left direction in the Figure 3) in contact, the ball 17 is rotated around the ball support shaft 15. At this time, as indicated by the two-dot chain line in Figure 3, a pressing force is applied to the skin 20 from the ball 17. After the ball 17 is moved forward, when the ball 17 is moved backward so as to return to the original position, the skin 20 located between the balls 17 is picked up with the rotation of the balls 17 as indicated by the two-dot chain line in Figure 4.

[0023] That is, as illustrated in Figure 5, when the two balls 17 are moved forward to an arrow P1 direction, each of the balls 17 is rotated to an arrow P2 direction. Thus, the skin 20 is pushed wide and pressed. On the other hand, when the two balls 17 are moved backward in an arrow Q1 direction, each of the balls 17 is rotated in an arrow Q2 direction. Thus, the skin 20 located between the two balls 17 is picked up as if it is wound up. It is to be noted that, when the two balls 17 press the skin 20 in the forward movement, the skin 20 between the two balls 17 is picked up as a reaction to the pressing force.

[0024] In this case, the ball support shaft 15 is inclined forward to the center line x of the handle 11, or more specifically, since the side projection angle α of the ball support shaft 15 to the center line x of the handle 11 is set to 90 to 110 degrees, the reciprocating operation of the beauty instrument 10 can be performed without raising the elbow or bending the wrist too much. Moreover, the operation can be continued while the axis y of the ball support shaft 15 is maintained close to a right angle to the skin 20 surface. Thus, the ball 17 can be effectively pressed to the skin 20, and the massaging action can be expressed efficiently.

[0025] Moreover, since the portion in contact with the skin 20 is constituted not by a conventional cylindrical roller but a completely circular ball 17, the ball 17 is brought into contact with the skin 20 in an area smaller than the roller. Thus, the ball 17 can cause the pressing force and the picking-up force to act concentrically on a local part of the skin 20 and at the same time, the movement of the ball 17 to the skin 20 is smooth, and the moving direction can be changed easily.

[0026] Therefore, the skin 20 of the face, the arm, and the like is massaged by the pressing force involved in the rotation of the ball 17, blood flow is promoted in that portion, and circulation of lymph is promoted. Moreover, since the opening angle β of the pair of balls 17 is set to 50 to 110 degrees, and the interval D between the outer peripheral surfaces of the balls 17 is set to 8 to 25 mm, the appropriate pressing force can be made to act on the desired skin 20 portion and at the same time, the picking-up of the skin 20 can be performed not too strongly or not too weakly but comfortably.

Furthermore, since the diameter L of the ball 17 is set to 15 to 60 mm, it can appropriately handle the face or arm, and the operation of the beauty instrument 10 can be swiftly proceeded with. Thus, lift-up massage can be performed to a loose portion of the skin 20, for example, as desired.

[0027] In addition, when the skin 20 is pulled by the pressing force of the ball 17, pores are opened, while when the skin 20 is picked up between the balls 17, the pores are contracted, and dirt in the pores is removed. Moreover, the skin 20 of the user is in contact with the outer peripheral surface of the ball 17, and the hand of the user is in contact with a conductive portion on the handle 11 surface and thus, a microcurrent flows from the ball 17 through the skin 20 and the user's hand as illustrated in Figure 3 by power generated by a solar cell panel 24 and stimulates the skin 20, and the blood flow or circulation of lymph is promoted. Thus, the massaging action, the pressing/picking-up action, the lift-up action, the action to remove dirt in the pores, the electric stimulus action, and the like work on the skin 20 synergistically and integrally, and a desirable skin beautifying action is exerted.

[Working example] [0031] Hereinafter, the embodiment will be explained further specifically by citing working examples.

(Working examples 1 to 6, evaluation of side projection angle α)

In the beauty instrument 10 suitable for both the face and the body illustrated in the embodiment, the opening angle β of the balls 17 was set to 70 degrees, the diameter L of the ball 17 to 40 mm, and the interval D between the outer peripheral surfaces of the balls 17 to 11 mm, and by changing the side projection angle α from 90 to 110 degrees, the side projection angle α was evaluated. That is, the beauty instrument 10 was applied to the face or the body such as the arm, the neck, and the like, and function evaluation was made on the impression from use.

[0032] In a method of the function evaluation, the number of evaluators who use the beauty instrument 10 was set to 10, and when 8 evaluators or more in them felt good, it was given ◎, when 5 to 7 evaluators felt good, it was given○, when 3 or 4 evaluators felt good, it was given △, and when two evaluators or less felt good it was given ×.

[0033] Those results are shown in Table 1.

[0034] [Table 1]

	Side projection angle α (degrees)	Evaluation
Working Example 1	90	△

Working Example 2	93	○
Working Example 3	97	◎
Working Example 4	99	◎
Working Example 5	100	○
Working Example 6	110	△

As illustrated in Table 1, the results of Working Example 3 with the side projection angle α at 97 degrees and Working Example 4 at 99 degrees were the most favorable. Then, the results of Working Example 2 with the side projection angle α at 93 degrees and Working Example 5 at 100 degrees were favorable. Moreover, the results of Working Example 1 with the side projection angle α at 90 degrees and Working Example 6 at 110 degrees were also determined to be possible.

[0035] Therefore, the side projection angle α of the beauty instrument 10 is preferably within a range from 90 to 110 degrees, and the range from 93 to 100 degrees was found to be a more preferable range.

(Working Examples 7 to 15, evaluation of opening degree β)

The opening angle β in the beauty instrument 10 suitable for both the face and the body was evaluated. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the diameter L of the ball 17 to 40 mm, and the interval D between the outer peripheral surfaces of the balls 17 to 11 mm, the opening angle β was evaluated by changing the opening angle β from 40 to 120 degrees. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 2.

[0036] [Table 2]

	Opening angle β (degree)	Evaluation
Working Example 7	40	△
Working Example 8	50	○
Working Example 9	55	○
Working Example 10	60	○
Working Example 11	70	◎
Working Example 12	90	○
Working Example 13	100	○

Working Example 14	110	○
Working Example 15	120	△

As illustrated in Table 1, the result of Working Example 11 with the opening angle β at 70 degrees is the most favorable. Then, the results of Working Examples 8 to 10 with the opening angle β at 50 to 60 degrees and Working Examples 12 to 14 at 90 to 110 degrees were favorable. Moreover, the results of Working Example 7 with the opening angle β at 40 degrees and Working Example 15 at 120 degrees were determined to be possible.

[0037] Therefore, the opening angle β of the beauty instrument 10 is preferably within a range from 50 to 110 degrees, and the range from 65 to 80 degrees was found to be the most favorable.

(Working Examples 16 to 23, evaluation of diameter L of ball 17)

The diameter L of the ball 17 was evaluated for the beauty instrument 10 suitable for both the face and the body. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the interval D between the outer peripheral surfaces of the balls 17 to 11 mm, the diameter L of the ball 17 was evaluated by changing the diameter L of the ball 17 from 20 to 40 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 3.

[0038] [Table 3]

	Ball diameter L(mm)	Evaluation
Working Example 16	20	△
Working Example 17	25	△
Working Example 18	27.5	△
Working Example 19	30	△
Working Example 20	32.5	△
Working Example 21	35	○
Working Example 22	38.3	◎
Working Example 23	40	◎

As illustrated in Table 3, the results of Working Example 22 with the diameter L of the ball 17 at 38.3 mm and Working Example 23 at 40 mm were the most favorable.

Then, the result of Working Example 21 with the diameter L of the ball 17 at 35 mm was favorable. Moreover, the results of Working Examples 16 to 20 with the diameter L of the ball 17 at 20 to 31.5 mm were also determined to be possible.

[0039] Therefore, the diameter L of the ball 17 of the beauty instrument 10 is preferably within the range from 20 to 40 mm, the range from 35 to 40 mm is more preferable, and the range from 38.3 to 40 mm was found to be the most preferable.

(Working Examples 24 to 28, evaluation of interval D between outer peripheral surfaces of balls 17)

The interval D between the outer peripheral surfaces of the balls 17 was evaluated for the beauty instrument 10 suitable for both the face and body. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the diameter L of the ball 17 to 40 mm, the interval D between the outer peripheral surfaces of the balls 17 was evaluated by changing the interval D between the outer peripheral surfaces of the ball 17 from 8 to 15 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 4.

[0040] [Table 4]

	Interval D (mm) between balls	Evaluation
Working Example 24	8	△
Working Example 25	10	○
Working Example 26	11	◎
Working Example 27	12	○
Working Example 28	15	△

As illustrated in Table 4, the result of Working Example 26 with the interval D between the outer peripheral surfaces of the balls 17 at 11 mm was the most favorable. Then, the results of Working Example 25 with the interval D between the outer peripheral surfaces of the balls 17 at 10 mm and Working Example 27 at 12 mm were favorable. Moreover, the results of Working Example 24 with the interval D between the outer peripheral surfaces of the balls 17 at 8 mm and Working Example 28 at 15 mm were also determined to be possible.

[0041] Therefore, the interval D between the outer peripheral surfaces of the balls 17 of the beauty instrument 10 is preferably within the range from 8 to 15 mm, and the range from 10 to 12 mm is found to be more preferable.

(Working Examples 29 to 38, evaluation of diameter L of ball 17)

The diameter L of the ball 17 was evaluated for the beauty instrument 10 suitable mainly for the face. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the interval D between the outer peripheral surfaces of the balls 17 to 11 mm, the diameter L of the ball 17 was evaluated by changing the diameter L of the ball 17 from 15 to 40 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 5.

[0042] [Table 5]

	Ball diameter L (mm)	Evaluation
Working Example 29	15	○
Working Example 30	17	○
Working Example 31	20	○
Working Example 32	25	◎
Working Example 33	27.5	◎
Working Example 34	30	○
Working Example 35	32.5	△
Working Example 36	35	△
Working Example 37	38.3	△
Working Example 38	40	△

As illustrated in Table 5, when the beauty instrument 10 is for the face, the results of Working Example 32 with the diameter L of the ball 17 at 25 mm and Working Example 33 at 27.5 mm were the most favorable. Then, the results of Working Examples 29 to 31 with the diameter L of the ball 17 at 15 to 20 mm and Working Example 34 with the diameter L of the ball 17 at 30 mm were favorable. Moreover, the results of Working Examples 35 to 38 with the diameter L of the ball 17 at 32.5 mm to 40 mm were also determined to be possible.

[0043] Therefore, when the beauty instrument 10 is suitable for the face, the diameter L of the ball 17 is preferably within the range from 15 to 40 mm, and the range from 15 to 30 mm was found to be more preferable.

(Working Examples 39 to 44, evaluation of interval D between outer peripheral surfaces

of balls 17)

The interval D between the outer peripheral surfaces of the balls 17 was evaluated for the beauty instrument 10 suitable mainly for the face. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the diameter L of the ball 17 to 40 mm, the interval D between the outer peripheral surfaces of the balls 17 was evaluated by changing the interval D between the outer peripheral surfaces of the balls 17 from 6 to 15 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 6.

[0044] [Table 6]

	Interval D (mm) between balls	Evaluation
Working Example 39	6	△
Working Example 40	8	○
Working Example 41	10	○
Working Example 42	11	◎
Working Example 43	12	○
Working Example 44	15	△

As illustrated in Table 6, when the beauty instrument 10 is for the face, the result of Working Example 42 with the interval D between the outer peripheral surfaces of the balls 17 at 11 mm was the most favorable. Then, the results of Working Example 40 with the interval D between the outer peripheral surfaces of the balls 17 at 8 mm, Working Example 41 at 10 mm, and Working Example 43 at 12 mm were favorable. Moreover, the results of Working Example 39 with the interval D between the outer peripheral surfaces of the balls 17 at 6 mm and Working Example 44 at 15 mm were also determined to be possible.

[0045] Therefore, when the beauty instrument 10 is for the face, the interval D between the outer peripheral surfaces of the balls 17 is preferably within the range from 6 to 15 mm, and the range from 8 to 12 mm was found to be more preferable.

(Working Examples 45 to 51, evaluation of diameter L of ball 17)

The diameter L of the ball 17 was evaluated for the beauty instrument 10 suitable mainly for the body. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the interval D between the outer peripheral surfaces of the balls 17 to 11 mm, the diameter

L of the ball 17 was evaluated by changing the diameter L of the ball 17 from 30 to 60 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 7.

[0046] [Table 7]

	Ball diameter L (mm)	Evaluation
Working Example 45	30	△
Working Example 46	32.5	△
Working Example 47	35	△
Working Example 48	38.3	○
Working Example 49	40	○
Working Example 50	50	◎
Working Example 51	60	◎

As illustrated in Table 7, the results of Working Example 50 with the diameter L of the ball 17 at 50 mm and Working Example 51 at 60 mm were the most favorable. Then, the results of Working Example 48 with the diameter L of the ball 17 at 38.3 mm and Working Example 49 with the diameter L of the ball 17 at 40 mm were favorable. Moreover, the results of Working Examples 45 to 47 with the diameter L of the ball 17 at 30 mm to 35 mm were also determined to be possible.

[0047] Therefore, when the beauty instrument 10 is for the body, the diameter L of the ball 17 is preferably within the range from 30 to 60 mm, and the range from 38.3 to 60 mm was found to be more preferable.

(Working Examples 52 to 58, evaluation of interval D between outer peripheral surfaces of balls 17)

The interval D between the outer peripheral surfaces of the balls 17 was evaluated for the beauty instrument 10 suitable mainly for the body. That is, by setting the side projection angle α of the beauty instrument 10 to 97 degrees, the opening angle β of the balls 17 to 70 degrees, and the diameter L of the ball 17 to 40 mm, the interval D between the outer peripheral surfaces of the balls 17 was evaluated by changing the interval D between the outer peripheral surfaces of the balls 17 from 8 to 25 mm. The evaluation method was similar to that of Working Example 1. The obtained results are shown in Table 8.

[0048] [Table 8]

	Interval D (mm) between balls	Evaluation
Working Example 52	8	△
Working Example 53	10	○
Working Example 54	11	○
Working Example 55	12	◎
Working Example 56	15	◎
Working Example 57	20	○
Working Example 58	25	○

As illustrated in Table 8, the results of Working Example 55 with the interval D between the outer peripheral surfaces of the balls 17 at 12 mm and Working Example 56 at 15 mm were the most favorable. Then, the results of Working Example 53 and Working Example 54 with the interval D between the outer peripheral surfaces of the balls 17 at 10 to 11 mm, and Working Example 57 and Working Example 58 at 20 to 25 mm were favorable. Moreover, the result of Working Example 52 with the interval D between the outer peripheral surfaces of the balls 17 at 8 mm was also determined to be possible.

[0049] Therefore, when the beauty instrument 10 is for the body, the interval D between the outer peripheral surfaces of the balls 17 is preferably within the range from 8 to 25 mm, and the range from 10 to 25 mm was found to be more preferable.

By comprehensively considering the results of Working Examples 1 to 58 described above, it was determined that the side projection angle α of the beauty instrument 10 needs to be 90 to 110 degrees, 93 to 110 degrees is preferable, and 95 to 99 degrees is particularly preferable. It was determined that the opening angle β of the balls 17 is preferably 50 to 110 degrees, 50 to 90 degrees is more preferable, and 65 to 80 degrees is particularly preferable. It was determined that the diameter L of the ball 17 is preferably 15 to 60 mm, 32 to 55 mm is more preferable, and 38 to 45 mm is particularly preferable. It was determined that the interval D between the outer peripheral surfaces of the balls 17 is preferably 8 to 25 mm, 9 to 15 mm is more preferable, and 10 to 13 mm is particularly preferable.

[0050] It is to be noted that the embodiment can be embodied with the following

changes.

· As illustrated in Figures 8 and 9, the shape of the ball 17 can be formed having a balloon shape so that a curvature of the outer peripheral surface of the ball 17 on the handle 11 side becomes larger than the curvature of the ball support shaft 15 on the distal end side. When configured as such, since the skin can be picked up by the portion with a smaller curvature, and a picked-up state can be held by the portion with a larger curvature, the picking-up effect of the skin 20 when the ball 17 is moved backward can be improved.

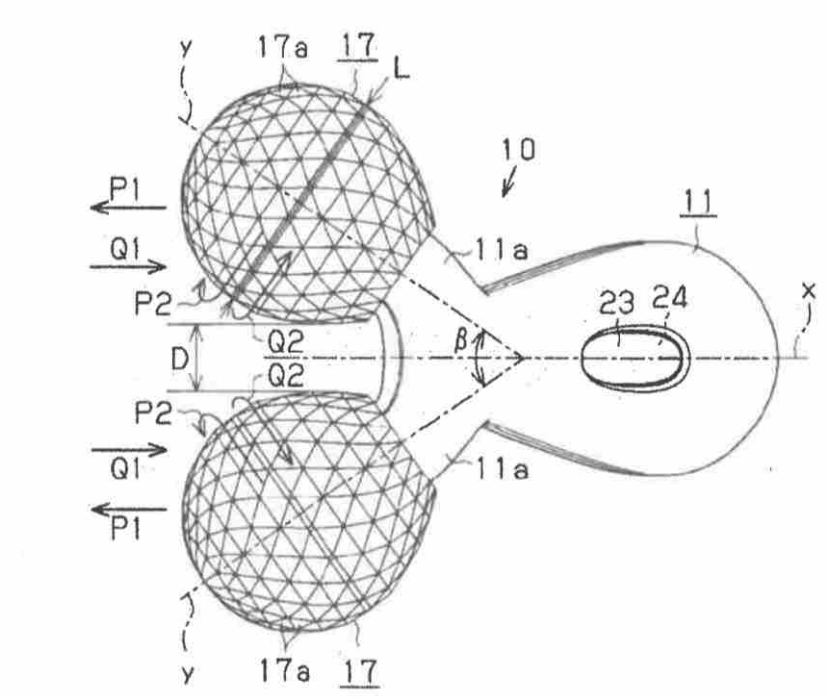
[0051]

· It is also possible to configure a space between the handle 11 and the bifurcated portion 11a thereof rotatable so that the side projection angle α of the axis y of the ball 17 with respect to the center line x of the handle 11 is made variable. In this case, the angle of the axis y of the ball 17 to the skin 20 can be easily changed, and usability can be improved.

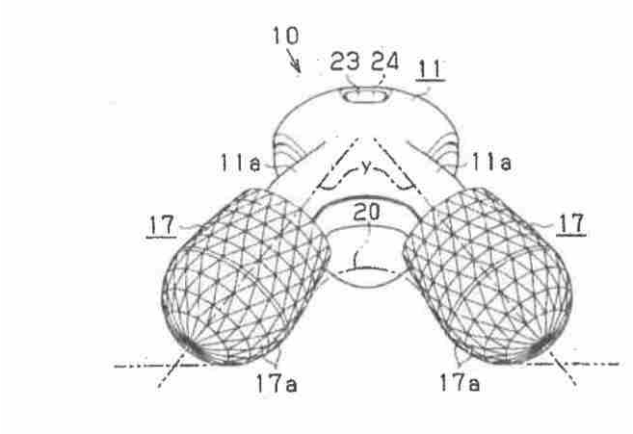
[0052]

· The shape of the ball 17 can be changed as appropriate to an oval sectional shape, an elliptic circular sectional shape, and the like. ...

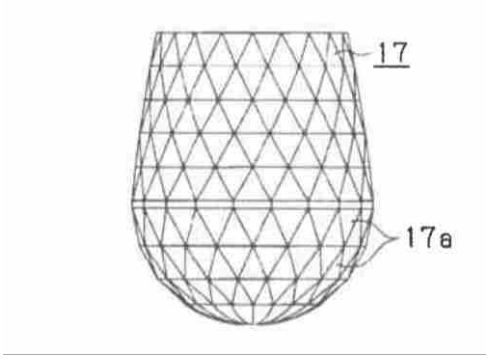
[Figure 5]



[Figure 8]



[Figure 9]



(2) Present Description 2 has the following description (Exhibit Ko 4).

[0001] This invention relates to a beauty instrument which gives an esthetic action such as a skin beautifying effect and the like to a user by rotating a rotary body on the body.

[0002] Conventionally, for this type of beauty instrument, a structure disclosed in Patent Document 1, for example, has been proposed. In this beauty instrument with the conventional structure, a bifurcated portion is provided at a distal end of the handle. By pressing each of the rotary bodies to the skin of the body and rotating it, an esthetic action such as a skin beautifying effect and the like is said to be given to the body.

[Problems to be Solved by the Invention] [0004] In the aforementioned Patent Document 1, a support structure such as a shaft for supporting the rotary body is not disclosed.

An object of this invention is to provide a beauty instrument which can rotatably

support the rotary body with respect to the support shaft.

[Means for Solving the Problems] [0005] In order to achieve the aforementioned object, this invention is a beauty instrument including a support shaft retained/fixed on a base end and a rotary body rotatably supported on a distal end side of the support shaft and configured such that the esthetic action is given to the body by the rotary body.

[0006] Moreover, the rotary body has a hole only on the base end side, and the rotary body is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof, the bearing member is retained by the support shaft at the distal end which is on a side opposite to the hole of the rotary body, a lock claw capable of elastic deformation protrudes from the bearing member, the bearing member has a flange portion on the base end side of the lock claw, the lock claw has a slanted surface whose distance to a rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, the rotary body has a stepped portion capable of being engaged with the lock claw on an inner periphery, and the stepped portion is locked on the base end sided of the lock claw and is located between the lock claw and the flange portion.

[Advantageous Effect of the Invention] [0008] As described above, according to this invention, the effect that the rotary body can be rotatably supported with respect to the support shaft is exerted.

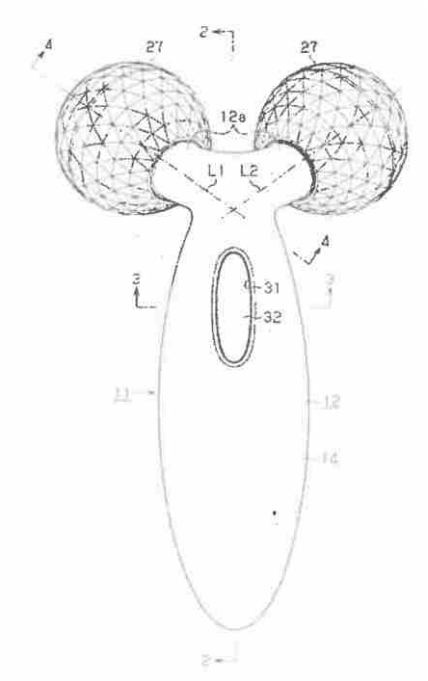
[0015] As illustrated in Figure 4, a cylindrical bearing member 25 made of a synthetic resin is fitted with a projecting end portion of each of the support shafts 20 and is retained/fixed by a stop ring 26. An outer front surface including both front and rear surfaces of this bearing member 25 is plated with metal, and conductivity between the bearing member 25 and the support shaft 20 is ensured. Moreover, instead of metal plating, conductivity may be ensured by configuring the bearing member 25 by a conductive resin. As illustrated in Figures 4 and 8, on the outer periphery of each of the bearing members 25, a pair of elastically deformable lock claws 25a is projected. On the bearing member 25 on each of the support shafts 20, a pair of rotary bodies 27 each forming a substantially spherical shape is rotatably fitted in and supported. Each of the rotary bodies 27 is configured by a core material 28 made of a synthetic resin, a cap material 29 made of a synthetic resin fitted on an inner periphery of a distal end of the core material 28, and an outer sheath material 30 made of a synthetic resin coated/molded on the outer periphery of the core material 28 and the cap material 29. On an outer surface of the outer sheath material 30, conductive metal plating is applied as a conductive portion, and conductivity with the bearing member 25 is ensured. On

the inner periphery of the core material 28, a stepped portion 28a capable of being engaged with the lock claw 25a of the bearing member 25 is formed. The lock claw 25a is engaged with the stepped portion 28a in a state where the rotary body 27 is fitted in the bearing member 25, and the rotary body 27 is retained/held with respect to the bearing member 25.

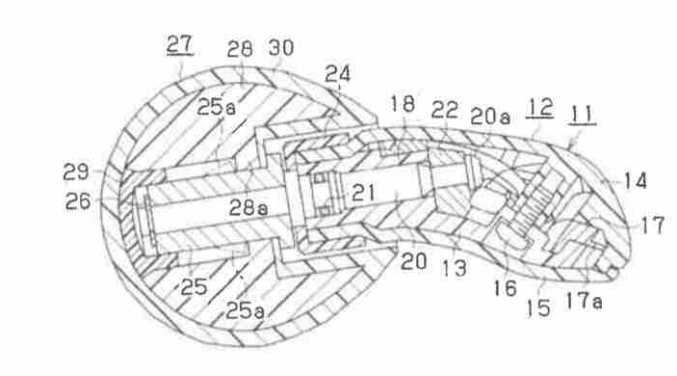
[0019] Therefore, according to this embodiment, the following effects can be obtained.

(1) In this beauty instrument, the pair of support shafts 20 located on crossing axes L1 and L2 is provided on the distal end portion of the handle 12. The rotary body 27 is rotatably supported on the distal end side of each of the support shafts 20, and the esthetic action is given to the body by those rotary bodies 27. ...

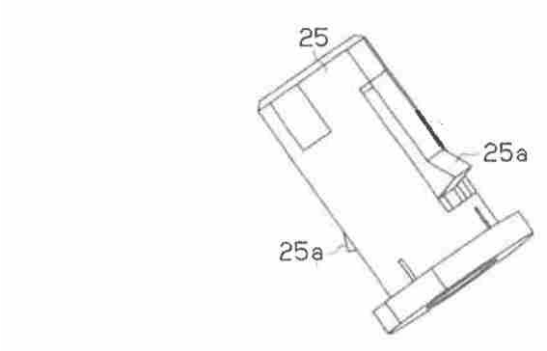
[Figure 1]



[Figure 4]



[Figure 8]



2. Whether Defendant's product belongs to the technical scope of Present Invention 1 (issue (1))

(1)Present Invention 1

According to the description in Present Description 1 held in the aforementioned 1(1), Present Invention 1 is found to have the following features.

That is, Present Invention 1 is an invention related to a beauty instrument capable of realizing a beautiful skin through promotion of a blood flow by massaging the skin such as the face, the arm, and the like by a ball for massaging provided on a handle (paragraph [0001]), but in this type of conventional beauty instrument, there are problems that, [i] since the center line of a handle and a rotation shaft of a pair of rollers are on one plane, when the handle of the skin beautifying roller is gripped by the hand and both rollers are pressed onto the skin, the elbow should be raised, the wrist should be bent so that the hand tip is directed to the skin side, and the handle is made upright with respect to the skin, which makes for poor operability, and there is a problem that

an acting state of the roller to the skin is greatly changed by a wrist angle; and [ii] since each of the rollers of the skin beautifying roller is formed having an elliptic cylindrical shape, a wide portion on the skin is evenly pressed, whereby sufficient opening of pores cannot be obtained, and the skin is not sandwiched by the rollers strongly enough, whereby opening or contraction of the pores is not performed sufficiently, dirt in the pores cannot be cleanly removed, and moreover, it is brought into linear contact with the skin, and resistance to the skin is large, the movement is not smooth, and a moving direction is easily limited (paragraphs [0002], [0004], [0005]). Thus, in Present Invention 1, in a beauty instrument in which a pair of balls is supported on a distal end portion of a handle at an interval from each other and rotatably around one axis, respectively, an axis of the ball is constituted to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle with respect to a skin surface during a reciprocating operation, an opening angle of a pair of ball support shafts is set to 65 to 80 degrees, and an interval between outer peripheral surfaces of the pair of balls is set to 10 to 13 mm ([Claim 1]), so that the axis of the ball can maintain a certain angle with respect to the skin surface during the reciprocating operation of the beauty instrument, and by constituting the portion in contact with the skin not by a cylindrical roller but by a completely circular ball, the ball is brought into local contact with the skin and causes a pressing force and a picking-up force to act concentrically, movement of the balls to the skin can be made smooth, and a degree of freedom in the moving direction is improved (paragraphs [0008], [0009]), whereby an excellent massaging effect to the skin can be exerted and at the same time, the pressing effect and the picking-up effect to the skin can be exerted markedly and continuously, and the effect that the operability is favorable can be also exerted (paragraph [0010]).

Paragraph [0025] of Present Description 1 describes that "since the portion in contact with the skin 20 is constituted not by a conventional cylindrical roller but by a completely circular ball 17, the ball 17 is brought into contact with the skin 20 in an area smaller than with the roller. Thus, the ball 17 can cause the pressing force and the picking-up force to act concentrically on a local part of the skin 20 and ...", and paragraph [0050] describes that "As illustrated in Figures 8 and 9, the shape of the ball 17 can be formed having a balloon shape so that a curvature of the outer peripheral surface of the ball 17 on the handle 11 side becomes larger than the curvature of the ball support shaft 15 on the distal end side. When configured as such, since the skin can be picked up by the portion with a smaller curvature, and a picked-up state can be held by the portion with a larger curvature, the picking-up effect of the skin 20 when the ball 17 is moved backward can be improved.", and by considering these descriptions

with the feature of Present Invention 1, one of the effects of Present Invention 1 is found to be that, in the case of the cylindrical roller, sandwiching is performed in a region corresponding to a length of the roller, and an acting picking-up force is weak, while in the case of the completely circular ball, the ball is brought into contact with the skin in an area smaller as compared with the cylindrical roller, and the picking-up force can be exerted concentrically to a local part of the skin, and when the shape of the ball is made a balloon shape, it is found that the completely circular portion with a small radius of curvature has a function of picking up the skin, while a cylindrical portion with a large radius of curvature has a function of holding the picked-up skin.

(2) Fulfillment of constituent feature D

A. Positions of two spots for measuring the "interval between the outer peripheral surfaces of the pair of balls" of constituent feature D

(a) The "interval between outer peripheral surfaces of a pair of balls" is interpreted to mean a “distance between the outer peripheral surfaces of the pair of balls", and positions of the two spots for measuring the distance will be examined below by considering the description in Present Description 1.

Present Description 1 does not have description defining the "interval between outer peripheral surfaces of a pair of balls", but paragraph [0021] describes that "an interval D between the outer peripheral surfaces of the balls 17 is preferably 8 to 25 mm, more preferably 9 to 15 mm, particularly preferably 10 to 13 mm, particularly in order that the picking up of the skin 20 is performed appropriately. If the interval D between the outer peripheral surfaces of the balls 17 is less than 8 mm, the picking-up effect acts too strongly to the skin 20 located between the balls 17, which is not preferable. On the other hand, if the interval D between the outer peripheral surfaces of the balls 17 exceeds 25 mm, it becomes difficult to pick up the skin 20 located between the balls 17, which is not preferable." and from the description, a numerical value suitable for performing picking-up of the skin appropriately is selected as the numerical value of the interval D between the outer peripheral surfaces of the balls, and thus it is reasonable to interpret that the interval D between the outer peripheral surfaces of the balls means an interval of the portions which pick up the skin.

And as in the aforementioned (1), in Present Invention 1, in the case where the shape of the ball is a balloon shape, the completely circular portion with a small radius of curvature has the function of picking up the skin, while the cylindrical portion with a large radius of curvature has the function of holding the picked-up skin and does not have the function of picking up the skin and thus, it is reasonable to interpret that the positions of the two spots for measuring the "interval between the outer peripheral

surfaces of the pair of balls" in the case where the ball has the balloon shape are positions where the interval between the outer peripheral surfaces of the completely circular or substantially completely circular portions with the small radius of curvature being the smallest. Moreover, Present Description 1 describes only the functional evaluation when the shape of the ball is completely circular (Exhibits Ko 2, 53), and this is consistent with the understanding that constituent feature D specifies the interval between the outer peripheral surfaces of the completely circular or substantially completely circular portions with a small radius of curvature when the shape of the ball is a balloon shape, too, and should be considered to support the aforementioned interpretation on the "interval between the outer peripheral surfaces of the pair of balls".

In this point, in Figure 5 illustrating the working example of Present Invention 1, reference character D indicating an interval between the outer peripheral surfaces of the pair of completely circular balls is illustrated, and it can be understood that reference character D is a distance of the portion where the interval between the outer peripheral surfaces of the two balls is the smallest, and the figure is based on the case where the shape of the ball is completely circular, and when the shape of the ball is a balloon shape, it should be understood that reference character D is applicable to the completely circular or substantially completely circular portion of the ball.

(b) Plaintiff of the first instance alleges that, from the description in paragraph [0021] in Present Description 1, it is obvious that the "interval between the outer peripheral surfaces of the pair of balls" in Present Invention 1 is based on a spot where the interval is the smallest when the skin is sandwiched, and reference character D (interval) in Figure 5 in Present Description 1 also indicates the minimum interval between the pair of balls and thus, the "interval between the outer peripheral surfaces of the pair of balls" of Present Invention 1 means a distance between the outer peripheral surfaces which are the closest of the pair of balls.

However, as described in the aforementioned (a), from the description in paragraph [0021], the numerical value suitable for performing the picking-up of the skin appropriately is selected as the numerical value of the interval D between the outer peripheral surfaces of the balls, and thus it is reasonable to interpret that the interval D between the outer peripheral surfaces of the balls means the interval between the portions for picking up the skin, and in the case where the shape of the ball is a balloon shape, the completely circular or substantially completely circular portion with a small radius of curvature has the function of picking up the skin, while the cylindrical portion with a large radius of curvature does not have the function of picking up the skin and thus, the "interval between the outer peripheral surfaces of the pair of balls" when the

shape of the ball is a balloon shape means a distance between the outer peripheral surfaces at positions where the interval between the outer peripheral surfaces of the completely circular or substantially completely circular portions with a small radius of curvature is the closest and is not necessarily the distance between the outer peripheral surfaces at the position where the interval between the outer peripheral surfaces of the balls is the closest.

And as described in the aforementioned (a), Figure 5 of Present Description 1 is based on the case where the shape of the ball is completely circular, and when the shape of the ball is a balloon shape, it should be understood that reference character D is applicable to the completely circular portion of the ball.

Moreover, from Figure of Present Description 1, when the shape of the ball is a balloon shape, it is found that a part closer to the handle has a smaller distance between the outer peripheral surfaces and thus, if the "interval between the outer peripheral surfaces of the pair of balls" is interpreted to mean the distance of the portion where the distance between the outer peripheral surfaces is the smallest as alleged by Plaintiff of the first instance, in the case where the shape of the ball is a balloon shape, even the ball having the same shape except that a length of the cylindrical portion with a large radius of curvature is different fulfills or does not fulfill the constituent feature D depending on the length of the cylindrical portion. However, it is hard to accept that the length of the cylindrical portion influences the function and effect of Present Invention 1 of giving the esthetic action, and according to the aforementioned interpretation by Plaintiff of the first instance, fulfillment of constituent feature D differs depending on the difference of the portion not influencing the function and effect of Present Invention 1, and the aforementioned interpretation by Plaintiff of the first instance is irrational.

Thus, the aforementioned allegation of Plaintiff of the first instance has no grounds.

B. Application

The shape of the rolling portion in Defendant's Products 1 to 9 and the interval between the outer peripheral surfaces of the rolling are as in "photos 1 to 9" in the attachment to this judgment, and according to "photos 1 to 9" in the attachment of this judgment and evidences (Exhibits Otsu 140 to 149, 177 to 188 (including branch numbers.)), it is found that the rolling portion of Defendant's Product is found to have a balloon shape in which an upper part is a substantially completely circular ball with a small radius of curvature and a lower part is a cylindrical ball with a large radius of curvature, and it is also found that a distance between the rolling portions at a position where the interval between the outer peripheral surfaces of the substantially completely

circular portion with a small radius of curvature is the smallest does not exceed 13 mm in any case.

Therefore, none of Defendant's Products fulfills constituent feature D of Present Invention 1.

(3) Summary

According to the above, none of the claims on the ground of infringement of Present Patent Right 1 of Plaintiff of the first instance has grounds.

3. Whether Defendant's product belongs to the technical scope of the present invention 2 (issue (3))

(1) Whether Defendant's product includes the "rotary body" of Present Invention 2 (constituent features F, G, H, K, L)

A. According to the description in the Scope of Claims of Present Invention 2 found in the aforementioned No. 2, 2 and the description in Present Description 2 found in the aforementioned 1(2), the "rotary body" of Present Invention 2 is found to mean a member having a hole only on the base end side and rotatably supported on the distal end side of the support shaft through the bearing member in a non-penetrating state where the distal end of the support shaft is located inside thereof.

According to Reference Figures 1-1 to 3, 2-1 to 3 in the attachment to this judgment, the evidences (Exhibits Otsu 1 to 7, 167, 168), and the entire import of the oral argument, it is found that the rolling portion of Defendant's Product has a hole only on the base end side and is rotatably supported on the distal end side of the support shaft through the bearing member in a non-penetrating state where the distal end of the support shaft is located inside thereof and thus, it is found to fall under the "rotary body" in Present Invention 2.

Therefore, Defendant's product includes the "rotary body" of Present Invention 2.

B. Defendant of the first instance alleges that the "rotary body" of Present Invention 2 is the one with the cap material 29 in the working example of Present Invention 2 as an indispensable element, and a member not including the cap material 29 does not fall under the "rotary body" in Present Invention 2 for the reasons that [i] in the structure of Present Invention 2, the cap material 29 is necessary for making the rotary body stable; [ii] in Other Lawsuit 2, Plaintiff of the first instance alleges that the cap material 29 is a constituent element of the "rotary body" of Present Invention 2 and the judgment of the lawsuit also judged as such; and [iii] the Scope of Claims of Present Invention 2 is that "rotatably supported on the distal end side of the support shaft".

However, the Scope of Claims of Present Invention 2 is as found in the

aforementioned No. 2, 2, and the Scope of Claims does not have the description that the cap material 29 is a constituent element of the rotary body.

Present Invention 2 is that the "rotary body" is rotatably supported on the "distal end side of the support shaft" (as described in D below, the side without the hole of the rotary body in the support shaft), and is not such that the "rotary body" is supported by the "distal end portion of the support shaft" and thus, inclusion of the member such as the cap material 29 on the distal end portion of the support shaft of the rotary body is not an indispensable structure.

Figure 4 in Present Description 2 illustrates the cap material 29, but the figure is only one of the working examples of Present Invention 2, and Present Description 2 does not have the description indicating that Present Invention 2 is limited to the structure of the figure (Exhibit Ko 4).

And in Present Invention 2, various structures can be considered as the structure for stably supporting the rotary body on the support shaft, and it cannot necessarily be found that the cap material 29 is needed.

Moreover, according to the evidence (Exhibit Otsu 165), in Other Lawsuit 2, when the court judged the allegation of Defendant of the first instance (Plaintiff of the lawsuit) that the "rotary body" is rotatably supported only by the "flange portion" and the "lock claw" in Present Invention 2, Present Invention 2 holds that the cap material 29 constitutes a part of the rotary body in the working example and also holds that "there is no description in the present description that the cap material 29 is an indispensable structure for preventing rattling." and thus, it does not hold that the cap material 29 is included in the "rotary body" as a constituent feature of Present Invention 2, and the allegation of the Plaintiff of the first instance (Defendant of the lawsuit) in the lawsuit can be also understood to that effect.

According to the above, the allegation of the Defendant of the first instance cannot be employed, and the cap material 29 cannot be considered to be an indispensable structure of the "rotary body" of Present Invention 2.

C. Defendant of the first instance alleges that, in Defendant's Product, the rolling portion, the cylindrical ring, and the cylindrical member integrally constitute the "rotary body" of Present Invention 2, and since the cylindrical ring and the cylindrical member have holes provided on both the base end side and the distal end side, Defendant's product does not fulfill the "rotary body has a hole only on the base end side" of Present Invention 2 (constituent feature G).

However, as described in the aforementioned A, in Defendant's Product, the member corresponding to the "rotary body" of Present Invention 2 is the rolling portion,

and according to Reference Figures 1-1 to 3, 2-1 to 3 in the attachment to this judgment, the evidences (Exhibits Otsu 1 to 7, 167, 168), and the entire import of the oral argument, it is not found that the rolling portion has a hole provided both on the distal end side and the base end side and thus, the aforementioned allegation of Plaintiff of the first instance has no grounds.

D. Defendant of the first instance alleges that the rolling portion of Defendant's product is not rotatably supported on the "distal end side of the support shaft" (constituent feature F).

(a) The term "distal end side" is different from the distal end portion and should be understood to usually mean on a side of the distal end. And as described in the aforementioned No. 2, 2, in the Scope of Claims of Present Invention 2, the terms "distal end side" and "base end side" are used as "the rotary body rotatably supported on the distal end side of the support shaft", "the rotary body has a hole only on the base end side", "the lock claw has a slanted surface whose distance to a rotation center of the rotary body in a bearing member becomes smaller as it goes toward the distal end side", and “the stepped portion is locked on the base end side of the lock claw" and thus, in Present Invention 2, the "distal end side" and the "base end side" are used as words forming a pair indicating a positional relationship, it is found that the "distal end side" means a direction of a portion where a hole is not opened in the rotary body, while the "base end side" indicates a direction where the hole is opened in the rotary body.

Therefore, it is reasonable to interpret that the "distal end side of the support shaft" of Present Invention 2 means the side where there is no hole in the rotary body in the support shaft when the support shaft is inserted into the rotary body and does not mean a distal end portion in the same direction of the support shaft.

(b) According to Reference Figures 1-1 to 3, 2-1 to 3 in the attachment of this judgment, the evidences (Exhibits Otsu 1 to 7, 167, 168), and the entire import of the oral argument, it is found that the rolling portion of Defendant's Product is rotatably supported on the support shaft on the side where there is no hole in the rotary body in the support shaft and thus, it can be considered that the rolling portion is rotatably supported on the "distal end side of the support shaft" of Present Invention 2.

(2) Whether Defendant's Product includes the "lock claw capable of elastic deformation" of Present Invention 2

A. According to the description in the Scope of Claims of Present Invention 2 found in No. 2, 2 and the description in Present Description 2 found in the aforementioned 1(2), it is found that Present Invention 2 has the structure of the Scope of Claims in order to achieve the object to provide a beauty instrument which can rotatably support

the rotary body with respect to the support shaft, and from the aforementioned description, it is found that the lock claw capable of elastic deformation is provided on the bearing member so as to protrude because the rotary body is rotatably supported by the support shaft through the bearing member by causing the stepped portion engaged with the lock claw, and the shape of the lock claw is made to have a slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side and is made elastically deformable because, when the bearing member is inserted into the rotary body from the base end side of the rotary body, the lock claw is elastically deformed to the direction of the rotation center of the rotary body (inward direction) so as to ride over the stepped portion, and after it rides over the stepped portion, it returns to the original state and is engaged with the stepped portion, whereby the bearing member is not removed from the rotary body.

And in the aforementioned structure of Present Invention 2, there is no need for the shape itself of the lock claw to be deformed for the lock claw to ride over the stepped portion, and the lock claw can ride over the stepped portion even by sinking to the circumferential direction, and it cannot be interpreted that means for riding over the stepped portion is limited to the structure that the shape itself of the lock claw is deformed from wording of the "lock claw capable of elastic deformation" and thus, if the lock claw sinks toward the circumferential direction when it rides over the stepped portion and returns to the original state after it rides over the stepped portion, it should be considered that the lock claw falls under the "lock claw capable of elastic deformation" even if the shape itself of the lock claw is not deformed.

B. According to Reference Figures 1-1 to 3, 2-1 to 3 in the attachment of this judgment, the evidences (Exhibits Otsu 1 to 7, 167, 168), and the entire import of the oral argument, it is found that the lock claw of Defendant's Product sinks toward the circumferential direction when it rides over the stepped portion and returns to the original state after it rides over the stepped portion whether it is the one in Reference Figures 1-1 to 3 or 2-1 to 3 in the attachment to this judgment and thus, it falls under the "lock claw capable of elastic deformation" of Present Invention 2.

C. Allegation of Defendant of the first instance

(a) Defendant of the first instance alleges that to be the "lock claw capable of elastic deformation", the slanted surface portion needs to be elastically deformed with the expression that "the lock claw capable of elastic deformation protrudes from the bearing member" of constituent feature I as the reason.

However, even if constituent feature I specifies that the lock claw protrudes from the bearing member, there is no reason that the meaning of "capable of elastic

deformation" of the lock claw should be interpreted as alleged by Defendant of the first instance.

(b) Defendant of the first instance alleges that, even if the slanted surface portion itself is not elastically deformed, if a structure that the slanted surface portion sinks toward the circumferential direction by elastic deformation of the rectangular portion is included, the Scope of Claims should be specified as "when the slanted surface is pressed, the portion having the rectangular shape is elastically deformed, and the slanted surface sinks toward the inner side in the radial direction and then restored, whereby the stepped portion is locked on the base end side of the lock claw" and not specified as the "lock claw capable of elastic deformation".

However, it should be considered that inclusion of the structure that, when the lock claw rides over the stepped portion, it sinks toward the rotation center direction of the rotary body and returns to the original state after it rides over the stepped portion can be sufficiently recognized from the expression of the "lock claw capable of elastic deformation" and thus, it cannot be found that the Scope of Claims should have the expression pointed out by Defendant of the first instance.

(c) Defendant of the first instance alleges that the structure that "when the slanted surface is pressed, whereby the portion having the rectangular shape is elastically deformed, and the slanted surface sinks to the inner side in the radial direction and then restored, the stepped portion is locked on the base end side of the lock claw" without elastic deformation of the lock claw is a publicly-known art, and the present invention 2 does not employ the structure but specifies that "the lock claw capable of elastic deformation protrudes from the bearing member".

However, even if the aforementioned structure pointed out by Defendant of the first instance is publicly known as the structure that the lock claw is engaged with the stepped portion, it is only a structure of a part of Present Invention 2 and thus, it does not make a reason why the aforementioned structure pointed out by Defendant of the first instance is not employed as the structure that the lock claw is engaged with the stepped portion in Present Invention 2.

(d) Defendant of the first instance alleges that the judgment of Other Lawsuit 2 finds that the lock claw and the rectangular portion have different structures, and the slanted surface portion constituted separately from the rectangular portion is elastically deformed.

However, according to the evidence (Exhibit Otsu 165), in the judgment of Other Lawsuit 2, it is found that the court does not hold that the lock claw and the rectangular portion have different structures or that the slanted surface portion itself of the lock

claw needs to be elastically deformed.

(e) Defendant of the first instance alleges that, if the "lock claw"" is interpreted to be the whole combining the slanted surface portion and the rectangular portion, the "base end side of the lock claw" includes the portion connected to a peripheral surface of the rectangular portion and the cylindrical portion, and the art of being engaged with the stepped portion on the portion side is also included, but such an art is irrational.

However, as described in the aforementioned A, the action in which, when the lock claw rides over the stepped portion, it sinks toward the circumferential direction and returns to the original state after it rides over the stepped portion is interpreted to be "capable of elastic deformation", and it is not that the "lock claw" is interpreted to be the whole combining the slanted surface portion and the rectangular portion and thus, the aforementioned allegation of Defendant of the first instance lacks premise.

(f) As described above, the allegation of Defendant of the first instance cannot be employed.

(3) Whether Defendant's product includes the "stepped portion" of Present Invention 2 (constituent feature L)

A. According to the description in the scope of claims of Present Invention 2 found in the aforementioned No. 2, 2 and the description in Present Description 2 found in the aforementioned 1(2), it is found that the "stepped portion" of Present Invention 2 is a member on the inner periphery of the rotary body, locked on the base end side of the lock claw, and located between the lock claw and the flange portion.

According to Reference Figures 1-1, 2-1 in the attachment to this judgment, the evidences (Exhibits Otsu 1 to 7, 167, 168), and the entire import of the oral argument, in Defendant's Product, the fitting 2 (cylindrical ring) is found to be a member located on the inner periphery of the rotary body, locked on the base end side of the lock claw, and located between the lock claw and the flange portion and thus, it falls under the "stepped portion" of Present Invention 2, and Defendant's product includes the "stepped portion" of Present Invention 2.

B. Defendant of the first instance alleges that the "stepped portion" of Present Invention 2 is limited to a stepped portion formed integrally with the core material of the rotary body and does not include a stepped portion formed of a member separate from the core material of the rotary body.

However, the Scope of Claims describes that "the rotary body ... has a stepped portion", and even if the stepped portion is a member separate from the rotary body, if it is a member having the function as the stepped portion, it should fall under the aforementioned "stepped portion" in wording. And even by examining the description

in Present Description 2, there is no description to the effect of limitation that the stepped portion is the same member as the rotary body.

Therefore, it should be considered that the "stepped portion" of Present Invention 2 only needs to be the one located on the inner periphery of the rotary body and having a function to be engaged with the lock claw and does not have to be formed integrally with the rotary body.

(4) Summary

As described above, Defendant's Product has the "rotary body", the "lock claw capable of elastic deformation", and the "stepped portion" of Present Invention 2 and fulfills the "rotary body supported ... on the distal end side of the support shaft" (constituent feature F), "the rotary body has a hole only on the base end side" (constituent feature G), and there is no issue on fulfillment other than them. And since the structure of Defendant's Product is as found in the aforementioned No. 2, 2, Defendant's Product is found to belong to the technical scope of Present Invention 2.

4. Whether Present Patent 2 according to Present Invention 2 should be invalidated by trial for patent invalidation (presence/absence of lack of inventive step with Exhibit Otsu 45 document as primarily cited reference) (issue (4)A)

(1) finding of Cited Invention

A. The Exhibit Otsu 45 document has the following description (Exhibit Otsu 45).

[0008] However, the conventional beautifying roller as described above has nonconformities that a rotating state of the roller is not favorable, and stimulus to the skin is not sufficient, the structure is complicated, a contact state with the skin is not favorable, and the like.

[0009] Thus, this device is to provide a magnet beautifying roller in which the rotation of the roller is smooth, the contact state with the skin is favorable, and an effect by magnetism is also added.

[Means for Solving the Problems] [0010] From the above, the magnet beautifying roller according to this device is characterized by being constituted by a handle body portion and a roller portion rotatably held by the handle body portion, the handle body portion is constituted by a grip portion with a predetermined length held by a user and a pair of roller holding portions extending from one end of the grip portion so as to be inclined at a first angle from the grip portion to a length direction of the grip portion and each of them being opened at a second angle, and the roller portion is formed by a magnet and is rotatably held by each of the roller holding portions.

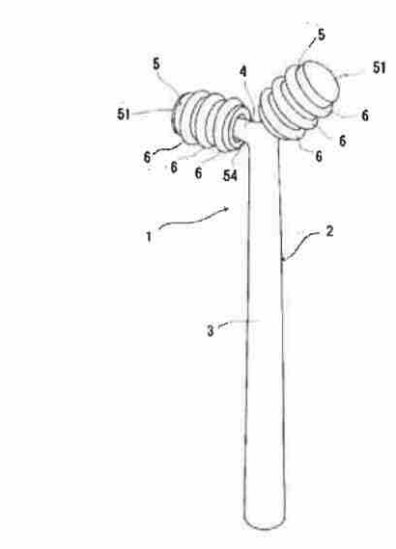
[0014] Moreover, an inserting/fitting hole into which the roller holding portion is

inserted/fitted is formed in the roller portion, and a bearing is provided between it and the roller holding portion so that the roller portion is made rotatable. As this bearing, a rolling bearing such as a ball bearing and a roller bearing or a sliding bearing such as a plastic bearing, a spherical sliding bearing, a sintered oil retaining bearing, and the like are desirable.

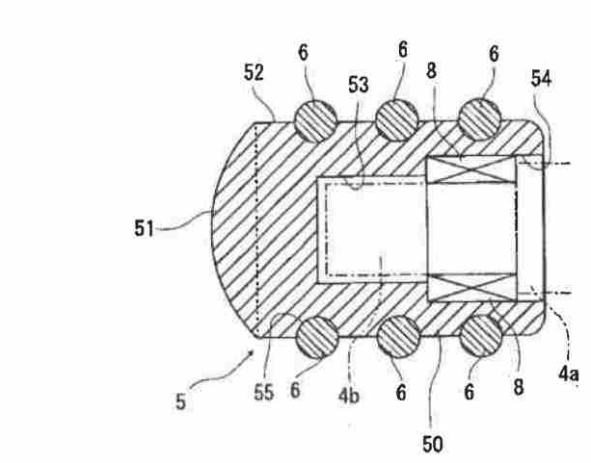
[0020] The handle body portion 2 is molded of a zinc alloy in this working example, and as illustrated in Figures 2 and 3, it is constituted by the grip portion 3 held by the user and the roller holding portion 4 inclined from this grip portion 3 to one side or to a front side, for example, at an angle α and extending so as to spread to both sides at an angle β and moreover, the roller holding portion 4 is constituted by a large-diameter portion 4a branching from the grip portion 3 and extending, and a small-diameter portion 4b formed integrally at a distal end thereof. To this small-diameter portion 4b, a bearing 8 described below is fixed. Moreover, the grip portion 3 is formed so as to become gradually larger from a branch portion of the roller holding portion 4 on one end side toward the other end side so as to improve ease of holding. Moreover, in this working example a section of the grip portion 3 is formed having an elliptic circular shape, but it may be circular.

[0023] Moreover, in a roller body portion 50 of the roller portion 5, a small-diameter hole 53 and a large-diameter hole 54 formed in an axial direction are consecutively provided, the small-diameter portion 4b of the roller holding portion 4 is inserted into the small-diameter hole 53, and the bearing 8 fixed to the small-diameter portion 4b is inserted into the large-diameter hole 54 and is fixed to an inner peripheral surface of the large-diameter hole 54. As a result, the roller portion 5 is rotatably held with respect to the roller holding portion 4.

[Figure 1]



[Figure 4]



B. According to the description in the Exhibit Otsu 45 document found in the aforementioned A, the Exhibit Otsu 45 document is found to describe the following invention (hereinafter, referred to as the "Exhibit Otsu 45 invention").

"A magnet beautifying roller including a small-diameter portion 4b which is a support shaft for rotating a roller portion 5 and a roller portion 5 rotatably supported by the small-diameter portion 4b in a roller support portion 4 provided on an upper part of a grip portion 3 and configured to give an esthetic action to a body by the roller portion 5, characterized in that the roller portion 5 has a hole only on a base end side, the roller

portion 5 is supported by the small-diameter portion 4b through a bearing 8 in a non-penetrating state where a distal end of the small-diameter portion 4b is located inside thereof, the bearing 8 is retained by the small-diameter portion 4b, the roller portion 5 retains the bearing 8 on an inner periphery, the bearing 8 has a cylindrical outer peripheral surface, and an inner periphery of a large-diameter hole of the roller portion 5 has a cylindrical shape"

On the other hand, in the structure alleged by Defendant of the first instance as the invention described in the Exhibit Otsu 45 document, the structure related to the shapes of the outer peripheral surface of the bearing 8 and the inner periphery of the large-diameter hole of the roller portion 5 is not specified, but since the structure corresponds to the constituent features I, J, K, L of Present Invention 2, the invention described in the Exhibit Otsu 45 document should be found by also specifying the structure.

(2) Comparison

A. When Present Invention 2 and Exhibit Otsu 45 invention are compared, there are found to be the following common feature and different features.

(a) Common Feature

"A beauty instrument including a support shaft provided on a handle and a rotary body rotatably supported by the support shaft and configured to give an esthetic action to a body by the rotary body, in which the rotary body has a hole only on a base end side, the rotary body is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof, the bearing member is retained by the support shaft, and the rotary body retains the bearing member on an inner periphery"

(B) Different Features

a. Different Feature 1 (undisputable)

In Present Invention 2, the support shaft is retained by/fixed to the base end of the handle, while in the Exhibit Otsu 45 invention, the small-diameter portion 4b is integrally formed with the grip portion 3 and is not retained or fixed with respect to the grip portion 3.

b. Different Feature 2 (undisputable)

In Present Invention 2, the rotary body is rotatably supported on the distal end side of the support shaft, while in the Exhibit Otsu 45 invention, the roller portion 5 is rotatably supported by a portion other than the distal end side of the small-diameter portion 4b.

c. Different Feature 3'

In Present Invention 2, the bearing member is retained by the support shaft at the

distal end on a side opposite to the hole of the rotary body, while in the Exhibit Otsu 45 invention, presence/absence of specific retaining of the bearing 8 is not clear.

d. Different Feature [iv]

In Present Invention 2, the lock claw capable of elastic deformation protrudes from the bearing member, the bearing member has the flange portion on the base end side of the lock claw, the lock claw has the slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, the rotary body has the stepped portion on the inner periphery, and the stepped portion is engaged with the lock claw between the lock claw and the flange portion, while in the Exhibit Otsu 45 invention, the outer peripheral surface of the bearing 8 and the inner periphery of the large-diameter hole of the roller portion 5 are both cylindrical.

B. Defendant of the first instance alleges on Different Feature [iv] that it should be divided into two different features; that is, a Different Feature 4 which is a difference related to the structure of the bearing member and a Different Feature 5 which is a difference related to the structure of the rotary body, and Different Feature 4 could have been easily conceived of by applying the Exhibit Otsu 46 art and the Exhibit Otsu 47 art, and Different Feature 5 by applying the Exhibit Otsu 44 art and the Exhibit Otsu 46 art or the Exhibit Otsu 47 art.

However, Different Feature [iv] relates to the structure of an integral art, and it should not be reasonable in finding by dividing it into the different feature related to the structure of the bearing member and the difference feature related to the structure of the rotary body. Thus, with regard to Different Feature [iv], whether or not it could have been easily conceived of by applying the art described in the Exhibit Otsu 46 document, the art described in the Exhibit Otsu 47 document, and the art described in the Exhibit Otsu 44 document will be examined.

(3) How easily Different Feature [iv] could have been conceived of

A. Description in documents

(a) Exhibit Otsu 46 document

The Exhibit Otsu 46 document has the following description, and according to the description, it is found that the Exhibit Otsu 46 document describes the Exhibit Otsu 46 art (a sliding bearing with a flange from which an elastic lock piece capable of elastic deformation protrudes and having a flange on the base end side of the elastic lock piece, and the elastic lock piece has a slanted surface whose distance to the rotation center becomes smaller as it goes toward the distal end side (Exhibit Otsu 46)).

[0001] [Technical Field] The present invention relates to a sliding bearing with a flange made of a resin optimal for support of a shaft used in a paper feeding mechanism

such as a facsimile.

[0002] [Conventional Art] With regard to a shaft of a feeding roller used in a paper feeding mechanism of a facsimile, since a rotation speed is not so high and a load is not so large and moreover, a simple structure in which only a circular bearing insertion hole is provided in a commercial support plate made of a steel plate is often employed for a mounting portion of the bearing, a sliding bearing with a flange made of a resin is employed in many cases as a bearing for supporting the shaft. Figures 5 to 7 illustrate the conventional sliding bearing with a flange made of a resin used in the paper feeding mechanism of a facsimile.

[0007] [Problems to be Solved by the Invention] However, in the case of the sliding bearing 1 with a flange illustrated in Figure 5, a ring 4 for retaining which is a separate body is needed for fixation to a support plate 2, which incurs an increase in the number of constituent components in the paper feeding mechanism and an increase in the number of assembling processes, which is problematic.

[0008] Moreover, in the case of sliding bearings 5, 7 with flanges illustrated in Figures 6 and 7, the ring 4 for retaining is not needed, and the number of constituent components or the number of assembling processes can be reduced. However, in the case of the structure illustrated in Figure 6, since a cylindrical portion 5a is pressed into a bearing insertion hole 2a, it causes a problem that a large operation force is also needed in assembling work. Moreover, in the case of the structure illustrated in Figure 7, too, since the cylindrical portion 7a needs to be fitted in the bearing insertion hole 2a in a diameter-reduced state, a large operation force is needed for the assembling work, which is a problem and furthermore, an inner diameter of the cylindrical portion 7a can easily fluctuate due to a separation 7d, and it also incurs a problem that obtaining higher fitting accuracy with the shaft is difficult.

[0009] Moreover, in the case of the structure illustrated in Figure 7, when a plate thickness of the support plate 2 is changed, a dimension between a flange 7b and a locking flange 7c is changed and needs to be newly designed, and the plate thickness of the support plate 2 which can be mounted is limited, which is also problematic.

[0010] The present invention was made in view of the aforementioned circumstances and has an object to provide a sliding bearing with a flange which does not need a ring for retaining which is a separate body for fixation to the support plate, can reduce the number of constituent components or the number of assembling processes, and moreover, does not need a large operation force during mounting, and can promote reduction of a cost of the paper feeding mechanism and the like and improvement of assembling performance and moreover, to provide a sliding bearing

with a flange for which a plate thickness of a support plate which can be mounted is not limited and which can be generally used for multiple types of paper feeding mechanisms and the like with different plate thicknesses of the support plate.

[0011] [Means for Solving the Problems] A sliding bearing with a flange made of a resin according to the present invention in order to achieve the aforementioned object includes a cylinder portion fitted in a bearing insertion hole penetrated/formed in a support plate of a device, and a flange provided by extending outward in a radial direction from an outer periphery of a base end portion of the cylinder portion and performing positioning of the cylinder portion in an axial direction by contact with the support plate and rotatably supports the shaft inserted into the cylinder portion, and is characterized in that, on an outer peripheral surface of the cylinder portion, an elastic lock piece which is elastically displaced inward of the cylinder portion when being inserted through the bearing insertion hole and when having passed through the bearing insertion hole, is elastically displaced outward of the cylinder portion and brought into contact with a peripheral edge of the bearing insertion hole of the support plate and prevents removal of the cylinder portion from the bearing insertion hole and is integrally formed.

[0016] [Mode for Carrying Out the Invention] Hereinafter, a preferred embodiment of the sliding bearing with a flange made of a resin according to the present invention will be described in detail on the basis of the drawings. Figure 1 illustrates an embodiment of the sliding bearing with a flange made of a resin according to the present invention, and Figure 1 is a perspective view of the sliding bearing with a flange made of a resin of the embodiment of the present invention, and Figure 2 is a vertical sectional view of the sliding bearing with a flange made of a resin illustrated in Figure 1.

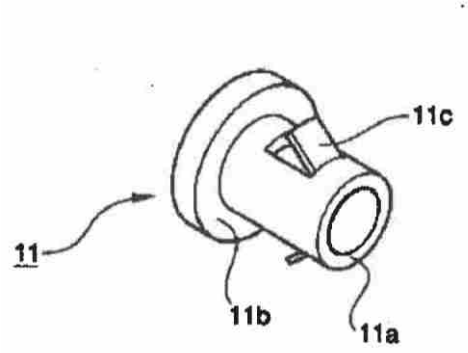
[0017] The sliding bearing 11 with a flange made of a resin of this embodiment is constituted by integrally molding a cylindrical cylinder portion 11a fitted in a circular bearing insertion hole 12a penetrated/formed in a support plate 12 of a paper feeding mechanism of a facsimile device, a flange 11b provided by extending outward in a radial direction from an outer periphery of a base end portion of the cylinder portion 11a and performing positioning in an axial direction of the cylinder portion 11a by contact with the support plate 12, and an elastic lock piece 11c protruding to the outer periphery of the cylinder portion 11a by using a synthetic resin and which rotatably supports the shaft inserted into the cylinder portion 11a. The support plate 12 is formed by press molding of a commercial steel plate material conforming to the JIS standard.

[0018] The elastic lock piece 11c is elastically displaced inward of the cylinder

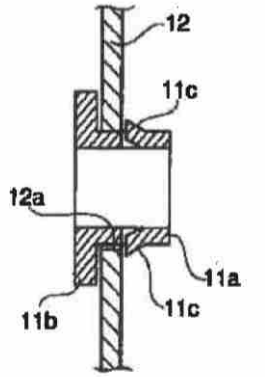
portion 11a when being inserted through the bearing insertion hole 12a and when having passed through the bearing insertion hole 12a, is displaced outward of the cylinder portion 11a by an elastic restoring force, brings a distal end into contact with a peripheral edge of the bearing insertion hole 12a of the support plate 12, and prevents removal of the cylinder portion 11a from the bearing insertion hole 12a.

[0019] In the sliding bearing 11 with a flange described above, when the cylinder portion 11a of the bearing is inserted into the bearing insertion hole 12a of the support plate 12, when the elastic lock piece integrally formed on the cylinder portion 11a of the bearing has passed the bearing insertion hole 12a, the elastic lock piece protrudes outward of the cylinder portion 11a by the elastic restoring force, locks the peripheral edge of the bearing insertion hole 12a of the support plate 12, and performs retention. Therefore, a ring for retaining which is a separate body is not needed for fixation of the bearing to the support plate 12, whereby the number of constituent components or the number of assembling processes can be reduced. Moreover, the elastic lock piece is a small article formed on a part of a peripheral wall of the cylinder portion 11a and does not require a large force for the elastic deformation. Thus, a large operation force is not needed during mounting, a cost of a paper feeding mechanism and the like can be reduced, and assembling performance can be improved.

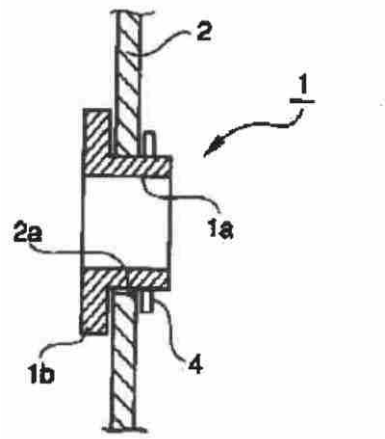
[Figure 1]



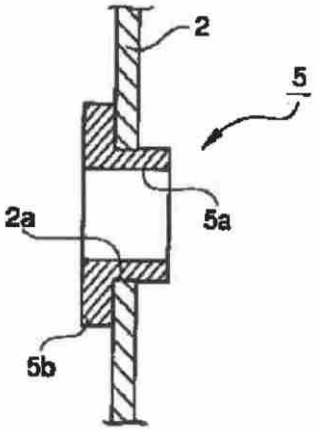
[Figure 2]



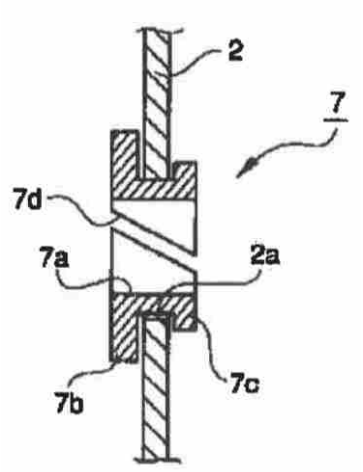
[Figure 5]



[Figure 6]



[Figure 7]



(b)Exhibit Otsu 47 document

The Exhibit Otsu 47 document has the following description, and from the description, it is found that the Exhibit Otsu 47 document describes the Exhibit Otsu 47-1 art (an inclined surface portion capable of elastic deformation protrudes from a bearing, the bearing has a flange portion on a base end side of the inclined surface portion, and the inclined surface portion has a slanted surface whose distance to a rotation center becomes smaller as it goes toward a distal end side), the Exhibit 47-2 art (a tongue piece capable of elastic deformation protrudes from the bearing, the bearing has a flange portion on a base end side of the tongue piece portion, and the tongue piece portion has a slanted surface whose distance to a rotation center in the bearing becomes smaller as it goes toward the distal end side), and the Exhibit 47-3 art (two tongue piece portions capable of elastic deformation protrude from the bearing,

the bearing has a flange portion on a base end side of the tongue piece portion, and the tongue piece portion has a slanted surface whose distance to the rotation center in the bearing becomes smaller as it goes toward the distal end side) (Exhibit Otsu 47).

a. [Field of Industrial Application]

This device relates to a fixation structure of a bearing for fixing a bearing made of a synthetic resin to a mounting member made of a thin plate such as a metal or a synthetic resin (second column, line 14 to third column, line 2).

b. [Conventional Art]

Conventionally, when a bearing made of a synthetic resin is to be fixed to a mounting member made of a thin plate, there is employed such a method that a flange portion is formed on an outer peripheral surface of the bearing, and the fixation is performed by means such as a set screw on the flange portion or a method that the bearing is pressed-into/fixed to the mounting member.

However, in the former fixation method, a hole for the set screw needs to be worked in the mounting member and the flange portion of the bearing, and the fixing work has extremely poor efficiency, which is a defect, and in addition, there is a problem that the sec screw gets loose by vibration or the like, and the bearing is removed from the mounting member.

Moreover, in the latter fixation method, a difference between a diameter of the hole formed in the mounting member and an outer diameter of the bearing; that is, a so-called interference, influences an inner peripheral surface of the bearing, which incurs a problem that a variation is caused in the inner diameter of the inner peripheral surface.

In order to solve such problems, a fixation structure of the bearing illustrated in Figure 9 is proposed.

This fixation structure is constituted by a bearing 3 including a cylinder portion 30, a flange portion 31 provided by extending outward in the radial direction on one of end-portion outer peripheral surfaces of the cylinder portion 30, an inclined surface portion 32 provided on the outer peripheral surface of the cylinder portion 30 by extending to a vicinity of a rear surface of the flange portion 31 by gradually expanding a diameter from a side opposite to the flange portion 31 toward the rear surface side of the flange portion 31, and an annular groove 33 formed between the rear surface of the flange portion 31 and an end surface of the inclined surface portion 32, and a mounting member 4 made of a thin plate including a circular hole 40, the bearing 3 is inserted into the circular hole 40 of the mounting member 4 from the end portion on the side opposite to the flange portion 31 and pressed until the rear surface of the flange portion 31 is brought into contact with the mounting member 4 while elastically deforming the

outer peripheral surface inclined surface portion 32 of the bearing 3, and has the annular groove 33 of the bearing 3 fitted with the mounting member 4 so as to be fixed to the mounting member 4. (the above, third column, lines 3 to 30)

c. [Problems to be Solved by the Device]

However, with the fixation structure described above, retaining means of the bearing 3 against the mounting member 4 is realized by a fitting force between the annular groove 33 of the bearing 3 and the mounting member 4 fitted with the annular groove 33 and thus, there is a concern that it is rotated between the circular hole 40 of the mounting member 4 and the annular groove 33 of the bearing 3 by a change in the fitting force, which would result in abrasion on the annular groove 33, and rattling occurs between the bearing 3 and the mounting member 4 at an early stage, which are problematic.

Moreover, this fixation structure is limited to the mounting member having the same thickness (plate thickness) as a width of the annular groove formed on the outer peripheral surface of the bearing and cannot handle the mounting member with a different thickness (plate thickness), and there is also a problem of economy that the bearing should be manufactured for each plate thickness of the mounting member.

In view of the aforementioned problems, this device has an object to obtain a fixation structure of a bearing which has good efficiency of a fixing work of the bearing to the mounting member, includes retention of the bearing, and can manage the mounting members with different plate thicknesses with one bearing. (the above, third column, line 36 to fourth column, line 4)

d. [Means for Solving the Problems]

In order to achieve the aforementioned object, the device employs the following structure.

That is, it is a fixation structure of a bearing for fixing a bearing made of a synthetic resin to a hole formed in a mounting member made of a thin plate, configured such that, on the mounting member in which a circular hole and at least one notch groove continuing to the circular hole are formed, a bearing including a cylinder portion, a flange portion provided on an outer peripheral surface of the cylinder portion by extending outward in a radial direction, at least one tongue piece portion provided on an outer peripheral surface of the cylinder portion by extending in a diagonal direction to the flange portion side from the outer peripheral surface, an engagement piece portion provided on an end portion of the tongue piece portion by extending toward the flange portion side, and a plurality of stepped portions formed on the engagement piece portion so that a gap from the flange portion rear surface is gradually reduced is fixed by

causing the engagement piece portion to be engaged with the notch groove and by sandwiching the mounting member in the gap between the flange portion rear surface and a stepped portion of the engagement piece portion.

...

Reference numeral 1 denotes the bearing made of a synthetic resin, and the bearing 1 includes the cylinder portion 10, the flange portion 11 provided on one of end-portion outer peripheral surfaces of the cylinder portion 10 by extending outward in the radial direction, the one tongue piece portion 12 provided on the outer peripheral surface of the cylinder portion 10 by extending in the diagonal direction to the flange portion 11 side from the outer peripheral surface, the engagement piece portion 13 provided on the end portion of the tongue piece portion 12 by extending toward the flange portion 11 side, and a plurality of stepped portions 14 (three in this working example) formed on the engagement piece portion 13 so that gaps t_1, t_2, and t_3 from the rear surface of the flange portion 11 are gradually reduced.

Reference numeral 2 denotes the mounting member made of a thin plate such as a metal or a synthetic resin, and the circular hole 20 and the notch groove 22 having a bottom portion 21 continuing to the circular hole 20 are formed in the mounting member 2.

The circular hole 20 is drilled with substantially the same diameter as an outer diameter of the bearing 1, and a width W of the notch groove 22 is formed substantially the same as a width w of the engagement piece portion 13 formed on the outer peripheral surface of the bearing 1.

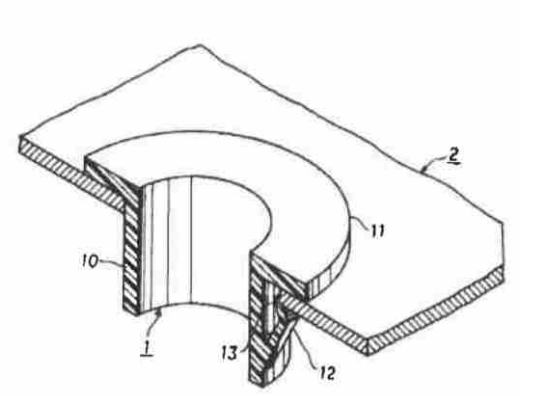
Moreover, a depth D of the notch groove 22 is adjusted as appropriate depending on a thickness T of the mounting member 2.

...

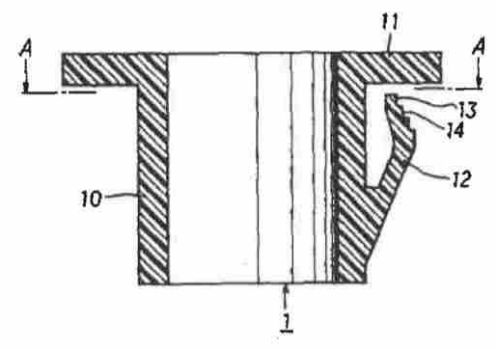
Figure 6 and Figure 7 illustrate a second working example of this device.

In this working example, the circular hole 20 and the notch groove 22 continuing to the circular hole 20; that is, two elements, are formed by facing each other on the mounting member 2, and two pieces of the tongue piece portions 12 each including the engagement piece portion 13 are formed on an end portion of the outer peripheral surface of the cylinder portion 10 in the bearing 1 by facing each other. (the above, fourth column, line 5 to fifth column, line 38)

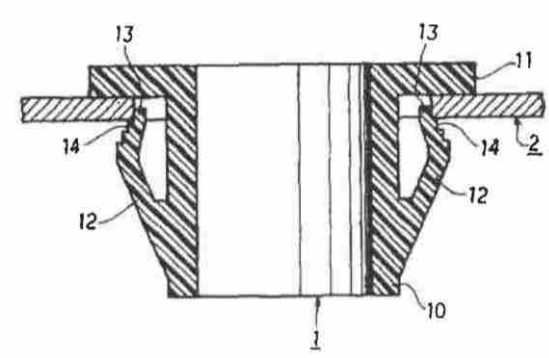
[Figure 1]



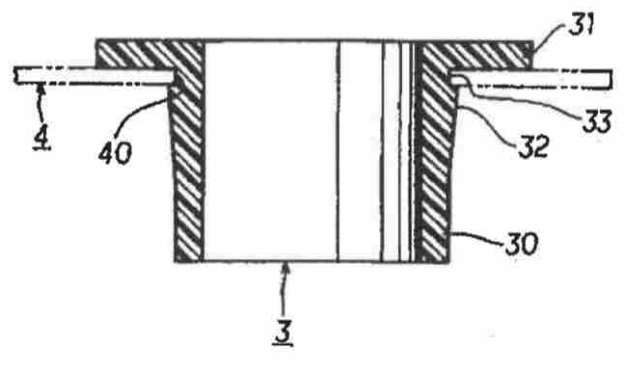
[Figure 2]



[Figure 6]



[Figure 9]



(C) Exhibit Otsu 44 document

The Exhibit Otsu 44 document has the following description.

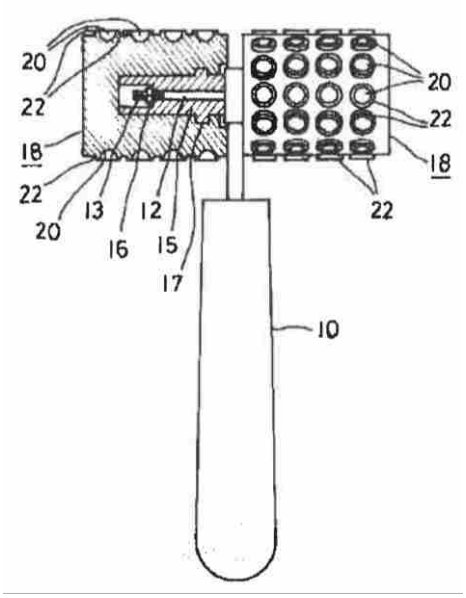
[0001] [Industrial Application Field] This device relates to a beautifying massager having a massaging member made of a rubber-state elastic member, having a large number of recesses formed on a surface of a cylindrical shape, and rotationally moved along the surface of the skin.

[0006] [Working Example] Hereinafter, a working example of this device will be described by referring to the drawings.

In one working example of this device illustrated in the figures, reference numeral 10 denotes a handle, and one shaft 12 so as to extend to both sides is fixed to a distal end portion. A thread 13 is made on both end portions of this shaft. Reference numeral 15 denotes a cylindrical body rotatably fitted from the both end portions of this shaft, respectively, and is retained by screwing a nut 16 with the screw portion 13.

Reference numeral 18 denotes two massaging members made of a material having rubber-state elasticity each having a substantially cylindrical surface, fitted in outer sides of the cylindrical body 15 on the two sides, respectively, and engaged with the cylindrical stepped portion 17. Reference numeral 20 denotes a large number of recesses formed on the surface of this massaging member, and an annular projecting portion 22 projected slightly outward by approximately 0.5 mm or the like, for example, is formed on a periphery of each of these recesses.

[Figure 1]



B. Examination

(a) a. According to the description in the Exhibit Otsu 45 document found in the aforementioned (1), the Exhibit Otsu 45 invention is an art with the contents that the roller portion 5 is rotatably held in the roller holding portion 4, to make a rotating state of the roller portion 5 favorable is one of the problems, and it is found that the roller portion 5 is made rotatable by the structure that the roller portion 5 is supported by the small-diameter portion 4b through the bearing 8, and according to the descriptions in the Exhibit Otsu 46 document and the Exhibit Otsu 47 document found in the aforementioned A, the Exhibit Otsu 46 art and the Exhibit Otsu 47 art are arts that a sliding bearing with a flange or a bearing is engaged with a support plate or a mounting member, but even if the support plate or the mounting member corresponds to the roller portion 5, and the sliding bearing with a flange or the bearing corresponds to the bearing 8, the support plate or the mounting member is fixed, and it is found that the shaft on the side of the sliding bearing with a flange or the bearing is rotated and thus, the Exhibit Otsu 45 invention should be considered to have a technical idea greatly different from those of the Exhibit Otsu 46 art and the Exhibit Otsu 47 art.

Moreover, according to the Exhibit Otsu 45 document, the Exhibit Otsu 45 invention is an invention related to the beautifying massager, and it is found that a conventional beautifying roller has problems that the rotating state of the roller is not favorable and stimulus to the skin is not sufficient, the structure is complicated, the

contact state with the skin is not favorable and the like and thus, this was invented in order to solve the problems, but according to the description in the Exhibit Otsu 46 document, the Exhibit Otsu 46 art is an art related to a bearing for supporting a shaft used in a paper feeding mechanism such as a facsimile and the like, and the ring 4 which is a separate body for retaining was needed in the conventional art, which incurs an increase in the number of constituent components and the number of assembling processes, and if the ring for retaining is made unnecessary, a large operation force is required for the assembling work or fitting accuracy with the shaft cannot be easily made higher and the like, which are problems, and it is found that the art is for solving these problems, and according to the description in the Exhibit Otsu 47 document, the Exhibit Otsu 47 art is an art related to the fixation structure of the bearing for fixing the bearing to the mounting member made of a thin plate, and in the conventional art, there was employed such a method that the flange portion is formed on the outer peripheral surface of the bearing, and fixation is realized by means such as a set screw or the like in the flange portion or such a method that the bearing is pressed-into/fixed to the mounting member, but these arts have problems that efficiency of the fixing work is poor, the inner diameter of the inner peripheral surface of the bearing fluctuates, and the like, and even the art for solving these problems has problems that the bearing is rotated and abrasion occurs in the contact portion of the bearing with the mounting member and thus, it is found that the art is for solving these problems. As described above, the Exhibit Otsu 45 invention has technical fields and problems different from those of the Exhibit Otsu 46 art and the Exhibit Otsu 47 art.

Therefore, the motivation to apply the Exhibit Otsu 46 art and the Exhibit Otsu 47 art to the Exhibit Otsu 45 invention is not found.

b. In response to that, Defendant of the first instance alleges that the bearing is widely known as a general-purpose mechanism, not limited to the beauty instrument (Exhibits Otsu 56 to 59) and thus, since the function of the Exhibit Otsu 45 invention is the same as those of the Exhibit Otsu 46 art and the Exhibit Otsu 47 art, differences in terms of the problems, objects, and applications do not constitute reasons for denying the motivation. However, as described in the aforementioned a, the technical idea is greatly different between the two and moreover, by considering that the technical fields and problems are also different, even if the function as the bearing is the same, the motivation to apply the Exhibit Otsu 46 art or the Exhibit Otsu 47 art to the Exhibit Otsu 45 invention should not be found.

(b) If the Exhibit Otsu 46 art or the Exhibit Otsu 47 art is applied to the Exhibit Otsu 45 invention, and the bearing 8 of the Exhibit Otsu 45 invention is replaced with

the sliding bearing with a flange of the Exhibit Otsu 46 art or the bearing of the Exhibit Otsu 47 art, it does not reach Present Invention 2, since there is no stepped portion in the roller portion 5 of the Exhibit Otsu 45 invention.

In this point, Defendant of the first instance alleges that the Exhibit Otsu 44 document describes the art corresponding to the stepped portion of Present Invention 2 and moreover, by applying the art, it reaches Present Invention 2, but after the Exhibit Otsu 46 art or the Exhibit Otsu 47 art is applied to the Exhibit Otsu 45 invention, to further apply the art described in the Exhibit Otsu 44 document is not found easy for a person ordinarily skilled in the art.

(4) Summary

As described above, it is not found that Present Invention 2 lacks inventive step with the Exhibit Otsu 45 document as the primarily cited reference.

5. Whether Present Patent 2 according to Present Invention 2 should be invalidated through a trial for patent invalidation (presence/absence of lack of inventive step with the Exhibit Otsu 135 document as the primarily cited reference) (issue (4)B)

(1) Finding of Cited Invention

A. The Exhibit Otsu 135 document has the following description (Exhibit Otsu 135).

[Scope of Claims]

(1) A roller for bare skin characterized in that a roller made of an elastic material on which a plurality of suction recess portions are disposed is constituted by being mounted on a grip portion, capable of rotation and attachment/detachment.

(5) A roller for bare skin characterized in that a roller made of an elastic material on which a plurality of suction recess portions are disposed is mounted on a grip portion capable of rotation and attachment/detachment.

[Detailed Description of the Invention]

[Industrial Application Field] The present invention relates to a roller for bare skin used for cleansing, massaging, and the like of the bare skin.

[Problems to be Solved by the invention] Therefore, in order to respond to a demand for bare skin beauty currently depending on functions and effects of cosmetics, an object is to provide a roller for bare skin as a tool which promotes, in addition to a massaging effect, active cleansing and activating actions to the bare skin with use of the cosmetics at the same time and can obtain a wrinkle smoothing effect and the like and moreover, a sense of use is favorable in the invention of this application.

[Means for Solving the Problems] The roller for bare skin of the present invention is made of an invention characterized in that a roller made of an elastic material on which

a plurality of suction recess portions are disposed is rotatably mounted on a grip portion and moreover, an invention characterized in that a mounting structure of the roller in such structure is constituted capable of rotation and attachment/detachment is a second invention thereof, and furthermore, in addition to a third invention characterized by being constituted by a pair of left and right rollers on each of which a plurality of suction recess portions are disposed on an outer peripheral surface of a roller body made of silicone such as dimethyl polysiloxane and others and a grip portion including a pair of left and right rotation shafts rotatably supporting the pair of left and right rollers, and a fourth invention characterized in that the pair of rollers in the structure of such third invention is supported capable of rotation and attachment/detachment with respect to the pair of left and right rotation shafts of the grip portion, which form the roller for bare skin of the present invention.

[Operation] The plurality of suction recess portions included in the structure of the roller for bare skin of this application invention are sucked to the bare skin with rotation of the roller including such suction recess portions, cause old keratin which was hard to remove and dirt to be floated, a cleansing action of the bare skin is exerted, and at the same time, appropriate stimulus is given to the bare skin so as to promote blood circulation, allows nutrition and energy in the blood to penetrate into the bare skin, and exerts metabolism.

[Working Example]

...

(First Working Example)

...

In Figure 1, reference numeral 1 denotes a roller formed by disposing a plurality of semi-spherical suction recess portions 3 on an outer peripheral surface of an elliptic spherical roller body 2, and this roller 1 is attached to a rotation shaft 11 of a grip portion 10, capable of rotation and attachment/detachment.

Moreover, as illustrated in Figure 2, the roller body 2 of the roller 1 is integrally formed of dimethyl polysiloxane, which is silicone, by opening an insertion port 4 for the rotation shaft 11 at a center part on a side portion and by providing an attachment hole 5 for the rotation shaft 11, communicating with the insertion port 4 at a center part of the roller body 2.

And an annular engagement hole 6 engaged with a flange 12 of the rotation shaft 11 is provided in the attachment hole 5 for the rotation shaft 11 in communication therewith.

Moreover, the grip portion 10 is constituted by projecting a support fitting 15 on a

distal end portion 14 of the flat-plate shaped grip 13 and by providing the rotation shaft 11 on the support fitting 15.

And the rotation shaft 11 is formed by mounting the support shaft 16 on the support fitting 15 as illustrated in Figure 3, and a hollow-state rotation rod 17 is rotatably attached to this support shaft 16.

Moreover, the support shaft 16 is formed integrally by drilling an annular engagement groove 20 in a distal end portion 19 of a shaft body 18 having an outer diameter smaller than an inner diameter of the rotation rod 17, and the rotation rod 17 is formed by providing a hollow-state rod body 21 having an inner diameter larger than the outer diameter of the support shaft 16, and three pieces of elastic pieces 22 by drilling three long grooves 23 (only one of the long grooves is illustrated in Figure 3) at positions dividing an outer peripheral direction into three equal parts toward a rear end portion side where the flange 12 is projected on a distal end portion side of this rod body 21 and further by projecting an engagement projection 24 engaged with the engagement groove 20 of the support shaft 16 on a distal end inner periphery of each of the elastic pieces 22.

It is to be noted that the inner diameter between the projected portions of the engagement projection 24 is smaller than the outer diameter of the support shaft 16 and slightly larger than the outer diameter of the engagement groove 20.

Therefore, the rotation rod 17 is attached in the support shaft 16 through the distal end portion 19 of the support shaft 16 through the opening of the rod body 21 on the flange 12 side and causes the engagement projection 24 of each of the elastic pieces 22 to ride over the distal end portion 19 of the support shaft 16 by using elasticity of the elastic piece 22 and then, to be engaged with the annular engagement groove 20 of the support shaft 16 so as to be rotatably attached to the support shaft 16, and removal/detachment thereof is prevented by engagement of the engagement projection 24 of each of the elastic pieces 22 with the engagement groove 20, whereby the rotation shaft 11 is constituted by the aforementioned structure.

By attaching the rotation shaft 11 of the grip portion 10 made of the aforementioned structure into the attachment hole 5 through the insertion port 4 of the roller 1 and by engaging the flange 12 in the engagement hole 6 of the attachment hole 5, the roller 1 is attached to the grip portion 10, and is capable of rotation and attachment/detachment so as to constitute the roller 30 for bare skin.

It is to be noted that the inner diameter of the attachment hole 5 of the roller 1 is formed slightly smaller than the outer diameter of the rotation rod 17 of the rotation shaft 11, but the outer diameter of the flange 12 is larger than the inner diameter of the

attachment hole 5, and at the attachment of the rotation rod 17, the engagement of the flange 12 with the engagement hole 6 can be performed by forcedly expanding the insertion port 4 by using the elasticity of the roller 1.

Moreover, in the aforementioned structure of the roller 30 for bare skin, the roller 1 is formed integrally of dimethyl siloxane but can be also formed integrally of silicone other than dimethyl siloxane; that is, silicone obtained by partially co-polymerizing diphenyl siloxane or by co-polymerizing vinyl methyl siloxane and the like or formed integrally of an elastic material such as other synthetic resins, synthetic rubber, and the like having elasticity.

Moreover, with regard to a molding material of the support shaft 16 and the rotation rod 17, they may be molded integrally by a synthetic resin such as Teflon resin, hard polyethylene and the like, respectively.

With regard to the shape of the roller 1, it can be formed with a columnar shape, a conical shape, or shapes similar to them and the like other than the illustrated elliptic spherical shape, and with regard to the shape of the suction recess portion 3 disposed on the outer peripheral surface, it can be worked by forming it of an arbitrary shaped recess portion such as a semi-elliptic spherical shape and a recess portion having a shape similar to them or a shape with a polygonal section and the like other than the illustrated semi-spherical shape.

Moreover, with regard to the structure of the grip portion 10, it is not limited to the aforementioned structure of the rotation shaft 11 but can be worked by employing other publicly-known structures sufficient to be able to rotatably support the roller 1, and the grip 13 can be worked with structures, in addition to provision of an engagement recess portion 26 for fingers at a center part of the distal end portion 14 as illustrated in Figure 1, having the shape of the grip 13 with a columnar body having an elliptic section as illustrated in Figures 5a and 5b or a circular rod body whose diameter is thinned as it reaches the distal end portion 14 as illustrated in Figures 6a and 6b.

Moreover, with regard to the structure for supporting the roller 1 with respect to the grip portion 10, capable of rotation and attachment/detachment, it is not limited to the illustrated structure and moreover, it can be worked also by rotatably supporting the roller 1 in order to obtain desired function and effect.

That is, instead of the structure in which the engagement hole 6 is provided in the attachment hole 5 of the roller 1, and the flange 12 is projected on the rotation shaft 11, there can be cited such structures that the flange 12 of the rotation shaft 11 is not projected, the inner diameter of the attachment hole 5 of the roller 1 is made substantially the same as the outer diameter of the rotation shaft 11, and the rotation

shaft 11 is forcedly attached into the attachment hole 5 by using an elastic action of the roller 1 so as to attach the roller 1 to the rotation shaft 11, or such that the roller 1 is fixed to the rotation shaft 11 by fixing means such as an adhesive or the like or moreover, such that the roller 1 is mounted on the rotation shaft 11 through other mounting means and the like.

When the roller 30 for bare skin made of the aforementioned structure is to be used, the grip 13 is gripped by the hand and then, the roller 1 is pressed onto the bare skin portion of the body or the face surface, for example, while being rotated in use.

Then, when the outer peripheral surface on which the suction recess portions 3 are disposed is pressed onto the bare skin while rotating the roller 1, each of the suction recess portions 3 is suctioned to the bare skin and rotated, and when each of the suction recess portions 3 is suctioned to the bare skin, sebum and dirt clogging pores in the bare skin are pulled out or old keratin and dirt between keratin bodies are floated, and dirt adhering to the skin surface is floated so as to be removed easily, and by applying lotion to the bare skin prior to use of the roller 1, cleansing can be performed more effectively, adhesion of the lotion to the bare skin is improved and moisture retaining property is ensured, and massaging effect can be improved.

Moreover, by performing the use while taking a bath or the like, such effects are obtained that blood vessels are stimulated, metabolism is activated, blood circulation is improved, nutrition is given to skin cells, an action of sebaceous glands is made smooth so that a state of the sebaceous glands is controlled, and the like and moreover, the wrinkle smoothing effect and the like can be obtained by massaging the bare skin in addition to a simple massaging effect.

Particularly, when the roller l is formed of dimethyl polysiloxane or other silicones, it is high in chemical resistance, water resistance, and durability, and feeling to the bare skin is extremely good, and the aforementioned function and effect can be obtained effectively as compared with other elastic materials.

...

(Second Working Example)

...

A roller 40 for bare skin of the second working example has the structure as illustrated in Figures 7 and 8 such that a pair of left and right rollers 101 and 102 are supported capable of rotation and attachment/detachment with respect to the grip portion 100, respectively, and the structure such that the pair of left and right rotation shafts 110 and 111 are provided through a connection portion 151 with respect to the support fitting 150 of the grip portion 100, and the shapes of the roller bodies 103 and

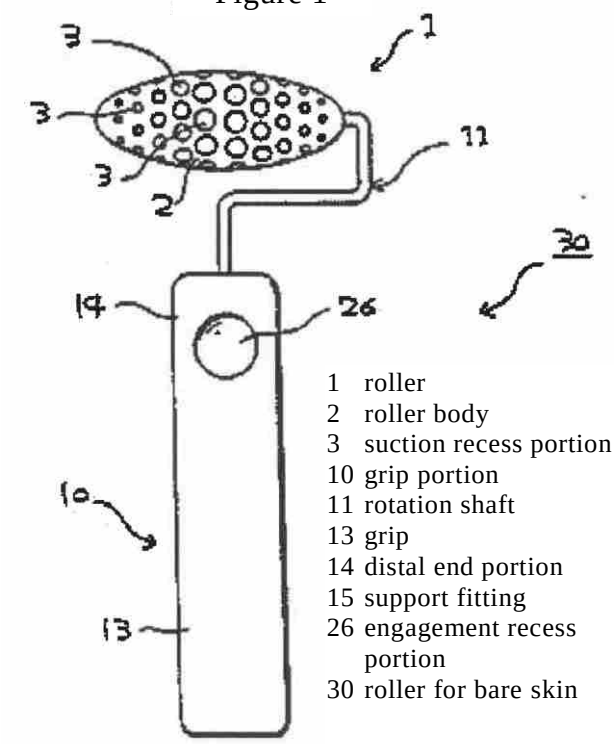
104 of the pair of left and right rollers 101 and 102 are formed conically, respectively, which are different from that of the first working example.

Then, the support fitting 150 of the grip portion 100 is made by projecting one pin on the distal end portion 14 of the grip 13, the connection portion 151 is made of a disc-shaped plate body 15 and is formed integrally by projecting support shafts 160 and 161 constituting the pair of left and right rotation shafts 110 and 111 on both the left and right side portions of this plate body 152 and moreover, it is constituted by integrally fixing the plate body 152 of the connection portion 151 to the distal end portion of the support fitting 150.

Moreover, the structure such that a plurality of semi-spherical suction recess portions 3 are disposed on the outer peripheral surfaces of the roller bodies 103 and 104 of the pair of left and right rollers 101 and 102, the insertion port 4 of the rotation shafts 110 and 111 is opened at the center part on the large-diameter portion side of the roller bodies 103 and 104, and the attachment hole 5 of the rotation shafts 110 and 111, communicating with the insertion port 4 is provided at the center part of the roller bodies 103 and 104 and integrally formed of dimethyl polysiloxane, and the annular engagement hole 6 to be engaged with the flange 12 of the rotation shaft 11 is provided in communication in the attachment hole 5 of the rotation shafts 110 and 111, and the structure of the support shafts 160 and 161 constituting the rotation shafts 110 and 111 and the rotation rod 17 rotatably attached thereto are similar to the structure of the first working example, and the same reference numerals are given to the same structural portions and the explanation therefor will be omitted.

Thus, when the roller 40 for bare skin is to be assembled by each of the portions illustrated in Figure 7, the rotation rod 17 is rotatably attached to the support shafts 160 and 161 of the grip portion 100 by a method similar to that of the first working example so as to constitute the rotation shafts 110 and 111 and then, the left and right rollers 101 and 102 are attached to the rotation shafts 110 and 111, capable of rotation and attachment/detachment, by attachment into the attachment hole 5 through the insertion port 4 and engagement of the flange 12 with the engagement hole 6 by a method similar to that of the first working example, whereby the roller 40 for bare skin illustrated in Figure 8 can be constituted.

Figure 1



1 roller
2 roller body
3 suction recess portion
10 grip portion
11 rotation shaft
13 grip
14 distal end portion
15 support fitting
26 engagement recess portion
30 roller for bare skin

Figure 2

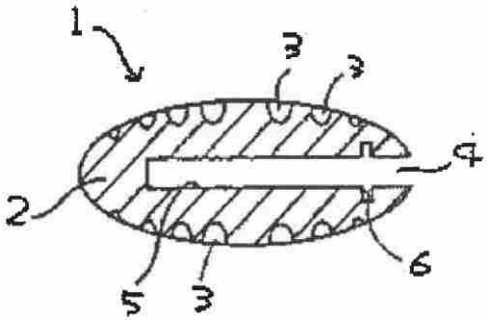


Figure 3

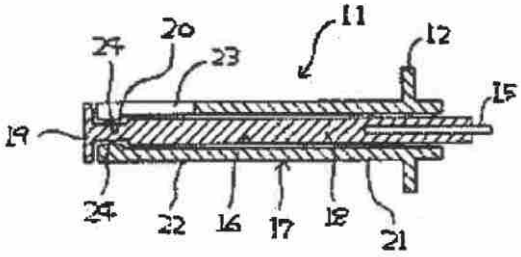


Figure 7

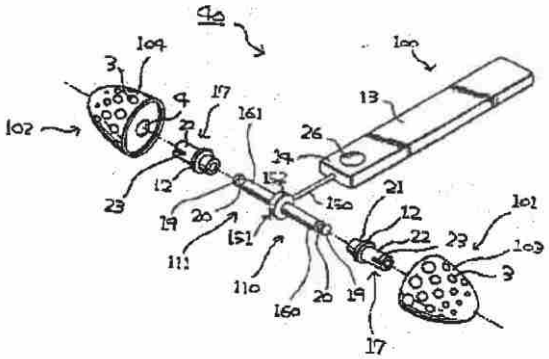


Figure 8

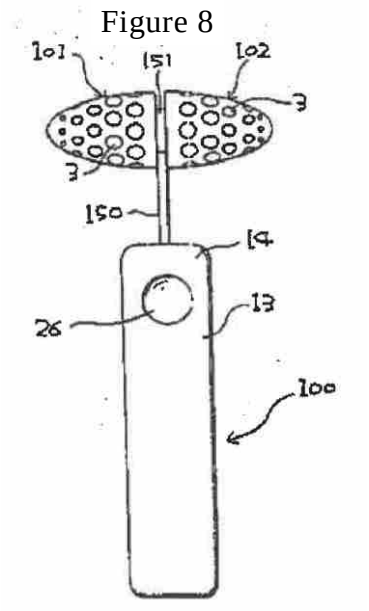


Figure 9

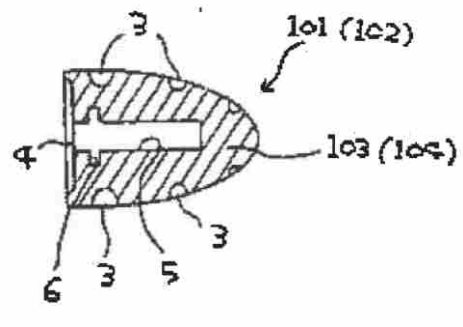
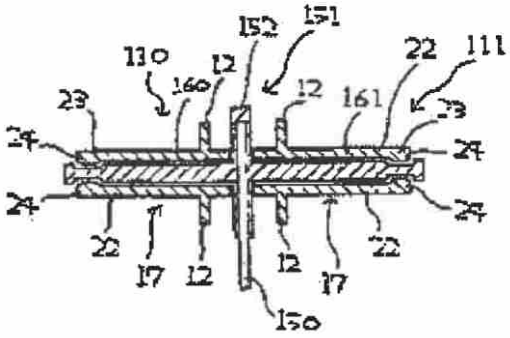


Figure 10



B. According to the description in the Exhibit Otsu 135 document found in the aforementioned A, the Exhibit Otsu 135 document is found to describe the invention as below (hereinafter, referred to as the "Exhibit Otsu 135 invention").

"A roller 30, 40 for bare skin including a support fitting 15, 150 projected on a distal end portion 14 of a grip 13, 100, a support shaft 16, 160, 161 mounted on a distal end portion of the support fitting 15, 150, and a roller 1, 101, 102 rotatably supported at a distal end from a base end of the support shaft 16, 160, 161 and used for cleansing, massaging, wrinkle smoothing, metabolism action, and the like to the bare skin of a body by the roller 1, 101, 102, in which the roller 1, 101, 102 has an insertion port 4 only on a base end side, the roller 1, 101, 102 is supported by the support shaft 16, 160, 161 through a rotation rod 17 in a non-penetrating state in which a distal end of the support shaft 16, 160, 161 is located inside thereof, in the rotation rod 17, when an

engagement projection 24 of each of the elastic pieces 22 on a side opposite to the insertion port 4 of the roller 1, 101, 102 is engaged with an annular engagement groove 20 drilled on the base end side of the distal end portion 19 having a diameter larger than an inner diameter of the rotation rod 17 provided at a distal end of the support shaft 16, 160, 161, whereby removal of the rotation rod 17 from the support shaft 16, 160, 161 is prevented, a flange 12 protrudes from the rotation rod 17, the roller 1, 101, 102 made of an elastic material on which a plurality of suction recess portions are disposed has a portion on the base end side of an engagement hole 6 capable of being engaged with the flange 12 on an inner periphery, and the portion on the base end side of the engagement hole 6 is locked on the base end side of the flange 12"

(2) Comparison

A. When Present Invention 2 is compared with the Exhibit Otsu 135 invention found in the aforementioned (1)B, it is found that there are following common feature and different features.

(a) Common Feature

A point that "A beauty instrument including a support shaft mounted on a handle on a base end and a rotary body rotatably supported on a distal end side of the support shaft and configured to give an esthetic action to a body by the rotary body, in which the rotary body has a hole only on a base end side and is supported by the support shaft through a bearing member in a non-penetrating state where a distal end of the support shaft is located inside thereof, the bearing member is retained by the support shaft at a distal end which is on a side opposite to the hole of the rotary body, a projecting portion protrudes from the bearing member, the rotary body has a stepped portion capable of being engaged with the projecting portion on an inner periphery, and the stepped portion is locked on the base end side of the projecting portion"

(b) Different Features

a. Different Feature [i]

A point that, in Present Invention 2, the lock claw capable of elastic deformation protrudes from the bearing member, the bearing member has the flange portion on the base end side of the lock claw, the lock claw has a slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side, the rotary body has a stepped portion capable of being engaged with the lock claw on an inner periphery, and the stepped portion is locked on the base end side of the lock claw and is located between the lock claw and the flange portion, while the Exhibit Otsu 135 invention includes the flange 12 from the rotation rod 17 but it is not clear whether or not the flange 12 is capable of elastic deformation

and the flange 12 is not the "lock claw" "having a slanted surface whose distance to the rotation center of the rotary body in the bearing member becomes smaller as it goes toward the distal end side", the rotation rod 17 (bearing member) does not have the "flange portion" "on the base end side of the lock claw", "the rotary body is not capable of being engaged with the lock claw on the inner periphery", or does not include the "stepped portion" "locked on the base end side of the lock claw and located between the lock claw and the flange portion"

b. Different Feature [iii]

A point that, in Present Invention 2, the support shaft is retained by/fixed to the handle, while in the Exhibit Otsu 135 invention, it is not specified whether the support shaft 16, 160, 161 is fixed to or retained by the grip 13, 100 (handle)

B. Defendant in the first instance alleges the difference in the structure of the bearing member separately from the difference in the structure of the rotary body with regard to Different Feature [i], but Different Feature [i] relates to a structure of an integral art, and it should be unreasonable to find them separately as the differences as alleged by Defendant of the first instance.

(3) How easily Different Feature [i] could have been conceived of

A. The Exhibit Otsu 194 document has the following description (Exhibit Otsu 194-1, 2).

[0018] An exercise tool according to the present invention can be configured as an arbitrary suitable type of exercise tool. For example, the tool can be configured as a musculoskeletal treatment tool such as a massaging tool and the like, for example ...

[0020] Regardless of a specific type of the tool constituting the exercise tool, the tool can be constituted by a user so as to conform to those specific needs and requirements. For example, if the exercise tool is to be constituted as a massaging tool, the massaging tool can be constituted in a plurality of various methods so that it can serve various people or can be used for massaging specific parts of a human body.

[0068] [Figure 12] Figure 12 is a view illustrating a person using the exercise tool according to a first preferred embodiment of the present invention so as to massage the upper thoracic vertebrae of himself/herself and the upper trapezius muscle and the levator scapulae muscle of himself/herself at the same time.

[0116] By referring to Figure 17, a rod module 100 of the exercise tool according to a second preferred embodiment of the present invention has a substantially cylindrical shape.

[0119] A plurality of parallel circular openings 106 separated at an equal interval extends laterally by passing through the rod module 100. The opening 106 is

perpendicular to an opening 105 extending through the module 100. Moreover, the opening 106 crosses the opening 105.

[0151] Figure 29 illustrates a plug 200 which can be used for fixing two of the modules 100, 120, 130, and 140 together in an arbitrary combination. The plug 200 is made of plastic and includes a circular flange 201 positioned between two cylindrical portions 202. Each of cylindrical portions 203 with a smaller width extends from each of the cylindrical portions 202. Each of the portions 203 with a smaller width includes a pair of elastic latch arms 204 faced in a diameter direction. Each of the latch arms 204 includes a projection 205 positioned on an end of the arm 204 and extending outward from the plug 200. The circular opening 206 extends from one end of the plug 200 to the other end of the plug 200.

[0152] Two of modules 100, 120, 130, and 140 can be fixed with the plug 200, capable of attachment/detachment by inserting each end of the plug 200 into the respective opening of each module. When the plug 200 is inserted into the opening, the portion 203 with a smaller width of the plug 200 is received by the portion with a smaller width of the opening, while the portion 202 with a larger width of the plug 200 is received by the portion with a larger width of the opening.

[0153] When the plug 200 is inserted into the opening, the portion with a smaller width of the opening is pressed onto the projection 205 of each of the latch arms 204, whereby the elastic latch arms 204 are moved toward each other. When the plug 200 is completely inserted into the opening, the projection 205 is received by a latch recess portion of the opening so that the latch arms 204 jump to their original positions and are meshed with the latch recess portions. Therefore, the latch arms 204 and the latch recess portions can prevent the plug 200 from being unintentionally pulled out of the opening of the module.

[0155] The latch arm 204 and the latch recess portion can prevent the plug 200 from being unintentionally pulled out of the opening, but in spite of that, the plug 200 can still rotate with respect to the opening even if the latch arm 204 and the latch recess portion are meshed with each other.

[0160] Figure 31 illustrates a plug 220 similar to the plug 200. For convenience, similar features of the plugs 200 and 220 are referred to by using similar reference numerals.

[0161] The plug 220 is different from the plug 200 in a point that the cylindrical portion 203 with a smaller width thereof is longer than the cylindrical portion with a smaller width of the plug 200. Moreover, the cylindrical portion 203 of the plug 220 includes each of a plurality of grooves 204.

[0162] Unlike the cylindrical portion 203 of the plug 200, the cylindrical portion 203 of the plug 220 is sufficiently long so that it can close the other opening of the module crossing the opening when it is inserted into the opening of one of the modules 100, 120, 130, and 140. Moreover, an additional length of the plug 220 means that the tool forming a part can be better reinforced as compared with the plug 200.

[0165] By referring to Figure 33, a lock pin 240 of the multi-functional exercise tool according to the second preferred embodiment of the present invention includes an elongated cylindrical shaft 241. The shaft 241 includes a first portion 242, a second portion 243, and a third portion 244. A substantially flat plastic head 245 is over-molded on the third portion 244 of the shaft 241.

[0166] A diameter of the first portion 242 of the shaft 241 in the lock pin 240 is slightly smaller than the diameter of the opening extending through the modules 100, 120, 130, and 140 and the plugs 154, 200, 210, 220, and 230 and thus, the shaft 241 can be inserted through those openings.

[0168] When the shaft 241 of the lock pin 240 is inserted into the plug 154, 200, 210, 220, or 230 into which itself is inserted into one of the openings of the modules 100, 120, 130, and 140, the shaft 241 can prevent the latch arm of the plug from removing the latch recess portion of the opening of the module. The lock pin 240 can prevent the plug from being unintentionally removed from the opening by preventing removal of the latch arm from the latch recess portion or at least further defers it. Therefore, the lock pin is particularly suitable for use in which the tool is exposed to a relatively high twist load which is likely to heighten the risk of unintentional removal of the latch arm from the latch recess portion which would cause unintentional pulling-out of the plug from the opening of the module.

[0169] Figure 34 illustrates the lock pin 240 when the shaft 241 of the lock pin 240 is inserted into the opening 206 of the plug 200 itself inserted to the other end of the opening 141 so that it is fixed to a ball module 140 in the middle through the one end of the opening 141 and to the module 140.

[0170] The projection 205 of the latch arm 204 of the plug 200 received by the opening 141 is received by the latch recess portion 250 positioned in the opening 141, and thus, the plug 200 is prevented from being pulled out of the opening 141 by that. In the shaft 241 of the lock pin 240, removal of the projection 205 from the latch recess portion 250 is prevented by the latch arms 204 pressed to each other. When the lock pin 240 is removed from the plug 200, the latch arm 204 can solely move as described above.

[Figure 29]

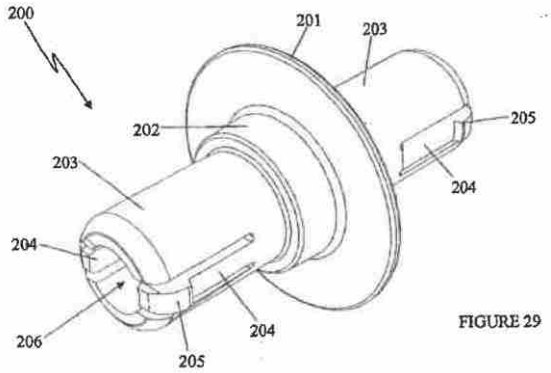
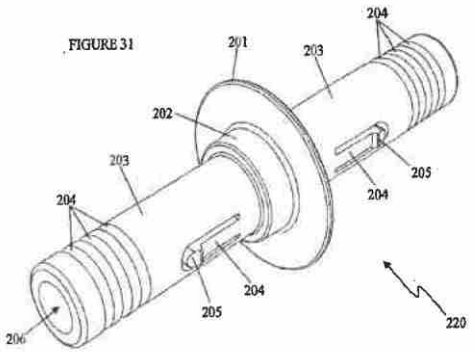


FIGURE 29

[Figure 31]



[Figure 34]

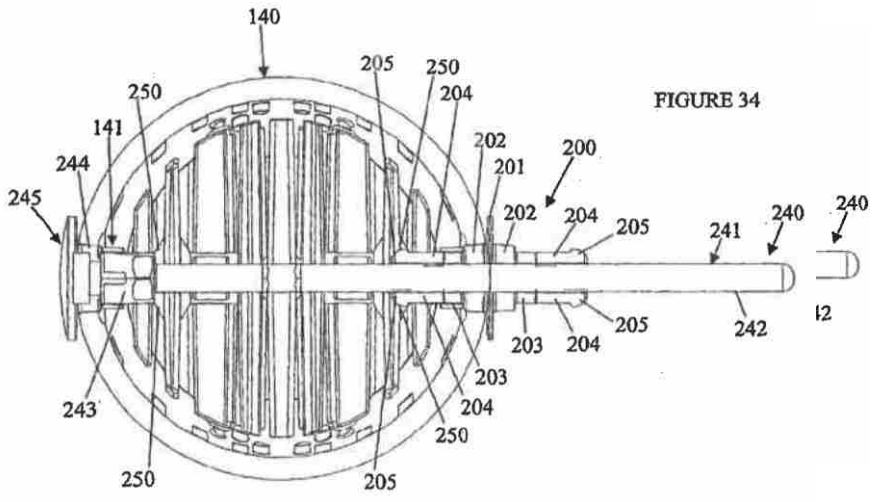


FIGURE 34

B.(a) According to the description in the Exhibit Otsu 194 document found in the aforementioned A, it is found that the Exhibit Otsu 194 document describes the following art.

"A massage tool rotatably supporting a module 130, 140 through a plug 200, 220, in which the plug 200, 220 has an elastic latch arm 204 including a projection 205 extending outward and has a flange 201 on a base end side of the latch arm 204, the projection 205 has a slanted surface whose distance to a rotation center of the module 130, 140 in the plug 200, 220 becomes smaller as it goes toward a distal end side, the module 130, 140 has a stepped portion locked on the base end side of the projection 205 of the latch arm 204 on an inner periphery, and the stepped portion is locked on the base end side of the projection 205 and is disposed between the projection 205 and the flange 201"

(b) Defendant of the first instance alleges that the plug 200, 220 described in the Exhibit Otsu 194 document is for mounting the module 130, 140 rotatably around the lock pin 240.

However, as described in the aforementioned A, paragraphs [0151], [0152] in the Exhibit Otsu 194 document describe that the plug can be used for fixing two of the modules in an arbitrary combination and that they can be fixed together with the plug by inserting each end of the plug into the respective opening of each module, and from the description, the plug is found to be a member for fixing by connecting the two modules.

Moreover, paragraphs [0168], [0170] in the Exhibit Otsu 194 document describe that, when the shaft of the lock pin is inserted into the plug inserted into the module, since the shaft prevents removal of the latch arm of the plug from the latch recess portion of the opening of the module, the lock pin is particularly suitable for use in the case where there is a high risk of removal of the latch arm from the latch recess portion, and the shaft prevents removal of the projection from the latch recess portion, and when the lock pin is removed from the plug, the latch arm can move, and from the description, the lock pin is found to be used for the purpose of preventing the removal of the plug from the module.

Therefore, the plug 200, 220 is used as a member for fixation by connecting the module 130, 140, it cannot be considered that the plug 200, 220 is interposed between the lock pin 240 and the module 130, 140 and is used as a bearing for the module 130, 140 to be rotatably supported by the lock pin 240, and the aforementioned allegation of the Defendant of the first instance has no grounds.

C. How easily application of the art described in the Exhibit Otsu 194 document to the Exhibit Otsu 135 invention could have been conceived of

(a) As described in the aforementioned B, the plug 200, 220 described in the Exhibit Otsu 194 document is a member for fixing by connecting the two modules and is not for functioning as a bearing member for rotatably supporting the rotary body with respect to the shaft by being interposed between the shaft and the rotary body and thus, there should not be motivation to replace it with the rotation rod 17 functioning as a bearing member in the Exhibit Otsu 135 invention.

(b) Allegation of Defendant of the first instance

a. Defendant of the first instance alleges that the Exhibit Otsu 135 document suggests that mounting means other than the rotation rod 17 may be used as the structure for rotatably mounting the roller 1, 101, 102 on the rotation shaft 11, 110, 111 and describes that even if the flange 12 does not project, the roller 1, 101, 102 can be

rotatably mounted and thus, employing the structure of the mounting means of the Exhibit Otsu 194 art and having the projection 205 and the flange 201 capable of elastic deformation of the Exhibit Otsu 194 art for the rotation rod 17 of the Exhibit Otsu 135 invention is easy for a person ordinarily skilled in the art.

However, even if the rotation rod 17 can be replaced with another bearing member, since the plug described in the Exhibit Otsu 194 document is not a bearing member as in the aforementioned B, there should not be motivation to replace the rotation rod with the plug described in the Exhibit Otsu 194 document and to employ the structures of the projection of the plug and the flange.

Therefore, the aforementioned allegation of Defendant of the first instance has no grounds.

b. Defendant of the first instance alleges that, from the description in paragraph [0155] of the Exhibit Otsu 194 document that "the latch arm 204 and the latch recess portion can prevent the plug 200 from being unintentionally pulled out of the opening, but the plug 200 can still rotate with respect to the opening even if the latch arm 204 and the latch recess portion are meshed with each other." and the description in paragraph [0166] that "a diameter of the first portion 242 of the shaft 241 in the lock pin 240 is slightly smaller than the diameter of the opening extending through the modules 100, 120, 130, and 140 and the plugs 154, 200, 210, 220, and 230 and thus, the shaft 241 can be inserted through those openings.", it is obvious that the plug 200, 220 functions as the bearing member, and the lock pin 240 functions as the rotation shaft.

However, paragraph [0155] of the Exhibit Otsu 194 document explains that the plug 200 is rotatable with respect to the module and does not describe that the plug 200 functions as the bearing member for supporting the module rotatably with respect to the lock pin 240. Moreover, paragraph [0166] only describes that the diameter of the shaft is slightly smaller than the diameter of the opening extending through the module and the plug and thus, it can be inserted through the openings of them and does not describe that the plug functions as the bearing member.

Therefore, the aforementioned allegation of Defendant of the first instance has no grounds.

(4) Summary

As described above, Present Invention 2 is not found to lack inventive step with the Exhibit Otsu 135 document as the primarily cited reference.

6. Claims for injunction and disposal

According to the aforementioned 3 to 5, the act of sales and the like of Defendant's Product by Defendant of the first instance infringes Present Patent Right 2. Thus, claims of Plaintiff of the first instance for injunction of transfer and offer of transfer and the claim for disposal of Defendant's Product from Defendant of the first instance under Article 100 of the Patent Act has grounds.

Defendant of the first instance alleges that the design of the structure of the bearing of Defendant's Product was changed, but since fulfillment of the constituent features is disputed, and the defense of invalidity of the patent was made in this lawsuit, the concern of transfer or the like of Defendant's Product has not ceased to exist.

7. Amount of damage of Plaintiff of first instance (issue (5))

(1) Article 102, paragraph (1) of the Patent Act

Article 102, paragraph (1) of the Patent Act is the provision prescribing the calculation method of the amount of damage when damages for lost profits by a decrease in sales quantity is claimed under Article 709 of the Civil Code, and in the main text of Article 102, paragraph (1) of the Patent Act, it is provided that the amount calculated by multiplying the number of articles so transferred by amount of profit per unit from the products that the patentee or exclusive licensee (hereinafter, referred to as the "patentee or the like") could have sold if there had been no infringement, may be fixed as the amount of the damage that the patentee has incurred, within the limits of an amount proportionate to the ability of the patentee or the like to work the patented invention, and in the proviso thereto, it is provided that if there are circumstances due to which the patentee or the like would have been unable to sell a number of products equivalent to all or part of number transferred, which are proved by the infringer, an amount proportionate to the number of products that could not have been sold due to such circumstances is to be deducted from the amount of damage thus calculated for the purpose of more flexible finding of a decrease in the sales quantity by promoting a shift to the burden of proof of the decrease in the number sold having a considerable cause and effect relationship with the infringement.

In view of the wording in Article 102, paragraph (1) of the Patent Act and the aforementioned gist, it should be interpreted that the "article that could have sold" by the patentee or the like "if there had been no infringement" only needs to be a product of the patentee or the like whose sales quantity is affected by the infringement; that is, the product of the patentee or the like having a competitive relationship with the infringement product in the market.

Moreover, the "amount of profit per unit" is an amount (amount of marginal profit)

obtained by deducting the cost additionally required in direct relation with the manufacture/sales of the aforementioned product for the patentee or the like from the sales of the product of the patentee or the like, and its burden of allegation/proof should be interpreted to reside on the side of the patentee including the ability of the patentee or the like to work.

Furthermore, with regard to the "circumstances due to which the patentee or the like would have been unable to sell" a number of products equivalent to all or part of number transferred, prescribed in the proviso to Article 102, paragraph (1) of the Patent Act, the infringer takes the burden of allegation/proof, and the amount according to the number corresponding to the circumstances shall be deducted when presence of such circumstances is alleged/proved.

(2) Transferred number of articles constituting the infringement

A. As described in the aforementioned 3 to 5, the transfer of Defendant's Product infringes Present Patent Right 2, and Defendant's product falls under the "article constituting the infringement".

B. The transferred number of Defendant's Product during a period from December 4, 2015 to May 8, 2017 (hereinafter, referred to as the "present infringement period"), which is a period of the tort on which Plaintiff of the first instance made the claim for damages in the present lawsuit is as follows, and it is found that Defendant transferred Defendant's Product in the number of 351,724 units in total and approximately 20,690 units on a monthly average (not disputable).

Defendant's Product 1 (DR-250A)	71,077 units
Defendant's Product 2 (DR-250C)	141,135 units
Defendant's Product 3 (FS-800)	15,114 units
Defendant's Product 4 (DR-250P)	82,584 units
Defendant's Product 5 (DR-250G)	18,526 units
Defendant's Product 6 (DR-250SW)	8,263 units
Defendant's Product 7 (JDR-300)	416 units
Defendant's Product 8 (DR-260BK)	6,088 units
Defendant's Product 9 (DR-260C)	8,521 units

C. Defendant's Products are wholesaled mainly to discount stores and variety shops, and may have price indication of 15,000 yen (without tax) according to the document prepared by Defendant of the first instance (Exhibits Ko 7 to 13), but they are actually sold at the price of approximately 3,000 to 5,000 yen (Exhibits Otsu 85 to 93).

Defendant's Products are described as Germa-mirror ball using particles of germanium, but they do not have a mechanism for generating microcurrents as

Plaintiff's Product which will be described later (Exhibits Ko 7 to 13).

(3) Amount of profit per unit from the product that could have been sold if there had been no infringement

A. Product that could have been sold if there had been no infringement

As in the aforementioned (1), the "product that could have been sold if there had been no infringement" only needs to be a product of the patentee or the like influenced by the sales quantity by the infringement; that is, a product of the patentee or the like having a competitive relationship in the market with the infringement product. Plaintiff of the first instance has sold the beauty instrument with the name "ReFa Carat" (hereinafter, referred to as "Plaintiff's Product") as the worked product of Present Invention 2 since February of 2009 (Exhibits Ko 23, 24, entire import of the oral argument), and it is obvious that Plaintiff's Product falls under the "product that could have been sold if there had been no infringement".

Plaintiff's Product is a beauty instrument which presses a pair of rolling portions applied with platinum coating on the surface of the roller and rotatably supported by the support shaft to the skin and rotates it so as to pick up the skin and to give an esthetic action to the skin (entire import of the oral argument) and has a mechanism for generating microcurrent by a mounted solar panel (Exhibit Ko 23).

Plaintiff's Product is sold at Plaintiff's shop, major mail-order companies, department stores, and major electronics retail stores at 23,800 yen, which is a desirable retail price, or a price close to that (Exhibits Ko 23, Otsu 94 to 108).

Plaintiff of the first instance had sold 1,256,410 units of Plaintiff's Product from October in 2015 to August in 2017 (monthly average: 54,626 units (fractions smaller than one yen omitted)), 18,770 units in the month with the lowest sales (January of 2016), and 85,492 units in the month with the highest sales (December of 2016) (Exhibit Ko 38).

B. Meaning of the amount of profit per unit

As in the aforementioned (1), the "amount of profit per unit" prescribed in Article 102, paragraph (1) of the Patent Act is the amount of marginal profit obtained by deducting the cost additionally required in direct relation with the manufacture/sales thereof for the patentee or the like from the sales of the product of the patentee or the like by the manufacture/sales of the product, and its burden of allegation/proof should be interpreted to reside on the side of the patentee.

C. Amount of marginal profit of Plaintiff's Product

(a) Sales and manufacturing cost

The total sales quantity of Plaintiff's Product from October in 2015 to August in

2017 is 1,256,410 units, the sales are 13,246,061,089 yen, and the manufacturing cost is ●●●●●●●●●●●●● (Exhibits Ko 38, 39).

(b) Costs to be deducted other than the manufacturing cost

a. The sales of all the products of Plaintiff of the first instance during the period in the aforementioned (a) is 67,109,681,552 yen (Exhibit Ko 40), and a sales ratio of Plaintiff's Product to all the products of Plaintiff of the first instance is 19.74% (13,246,061,089 yen ÷ 67,109,681,552 yen ≈ 0.1974).

b. Moreover, the sales of the entire products of the "ReFa" brand including Plaintiff's Product during the period in the aforementioned (a) is 34,209,586,196 yen (Exhibit Ko 28), and the sales ratio of Plaintiff's Product occupying the sales is 38.72% (13,246,061,089 yen ÷ 34,209,586,196 yen ≈ 0.3872).

c. The cost additionally required in direct relation with the manufacture/sales of Plaintiff's Product during the period in the aforementioned (a) is as in [i] to [ix] below other than the manufacturing cost in the aforementioned (a), and the amounts are obtained by multiplying each cost incurred for all the products of Plaintiff of the first instance (Exhibit Ko 40) by the ratio in the aforementioned a for [i], [iii], [iv], and [vi] to [ix] and by multiplying each cost (Exhibits Ko 32, 33) incurred for the "ReFa" brand product by the ratio in the aforementioned b for [ii] and [v] (fractions smaller than one yen omitted).

[i] Sales commission: ●●●●●●●●●●●●

[ii] Sales promotion cost: 257,984,777 yen

[iii] Point reserve: 7,417,870 yen

[iv] Sample cost: 53,439,379 yen

[v] Advertising cost: 520,753,024 yen

[vi] Packing and freight cost: 455,780,084 yen

[vii] Complaint handling cost: 65,485,934 yen

[viii] Product guarantee reserve transferred: 5,902,260 yen

[ix] Marketing research cost: 10,385,182 yen

Total amount of [i] to [ix]: ●●●●●●●●●●●●●

d. Defendant of the first instance alleges that all the costs of Plaintiff of the first instance should be deducted from the sales of Plaintiff's Products in accordance with the sales ratio of Plaintiff's Product.

However, as in the aforementioned (1), Article 102, paragraph (1) of the Patent Act is the provision prescribing the calculation method of the amount of damage when damages for lost profits by a decrease in sales quantity is claimed under Article 709 of the Civil Code, and the amount calculated by multiplying the number of articles

transferred by the infringer by the amount of profit per unit from the products that the patentee or the like could have sold if there had been no infringement is fixed as the aforementioned amount of damage. As described above, the amount of damage in the paragraph is the lost profits for the product of the patentee or the like which could have been sold by the patentee or the like if there had been no infringement and thus, in calculation of the "amount of profits per unit" in the paragraph, it is not reasonable to deduct the costs not in direct relation with the manufacture/sales of the product of the patentee or the like from the sales, and a labor cost of a management division, communication and transportation expenses, and the like usually fall under that. Moreover, plaintiff of the first instance had already manufactured/sold Plaintiff's Product, and it is not reasonable, either to deduct costs required for that and having already been paid (costs required for and having already been paid for equipment and facilities required for manufacturing the product, for example) from the sales.

In the aforementioned costs that, Defendant of the first instance alleges, should be deducted from the sales, all the costs other than the costs in [i] to [ix] in the aforementioned c should be considered to be costs that are not reasonable to be deducted from the aforementioned sales and thus, the aforementioned allegation of Defendant of the first instance has no grounds.

(c) The amount of marginal profit of Plaintiff's Product is 6,968,092,706 yen obtained by deducting the manufacturing cost in the aforementioned (a) and the total amounts of each cost in the aforementioned (b)c from the sales in the aforementioned (a) of Plaintiff's Product, and by dividing this by the sales quantity 1,256,410 units of Plaintiff's Product in the period in the aforementioned (a) is 5,546 yen (6,968,092,706 yen ÷ 1,256,410 yen ≈ 5,546.03 yen. Fractions smaller than one yen are omitted).

(d) According to the description in the Scope of Claims of Present Invention 2 found in the aforementioned No. 2, 2 and the description in Present Description 2 found in the aforementioned 1, Present Invention 2 is the invention of a beauty instrument constituted by members such as the rotary body, the support shaft, the bearing member, handles, and the like, and it is found to be an invention characterized by the shapes of the inner peripheral surfaces of the bearing member and the rotary body (hereinafter, this portion is referred to as the "Present Feature Portion".).

Since Plaintiff's Product is a beauty instrument which is to give an esthetic action to the skin by pressing the pair of rolling portions rotatably supported by the support shaft to the skin and rotating it so as to pick up the skin as described in the aforementioned A, the Present Feature Portion is only a part of Plaintiff's Product.

Incidentally, even if the feature portion of the patent invention is only a part thereof

in a product of a patentee who worked the patent invention as in this case, it is actually presumed that the total amount of the marginal profit obtained by sales of the product of the patentee is the lost profit of the patentee.

And for Plaintiff's Product, to realize favorable rotation of the rolling portion is also important, and it can be considered that the Present Feature Portion which is a member required for that; that is, the shapes of the inner peripheral surfaces of the bearing member and the rotary body, also contribute to the profit by sales of Plaintiff's Product correspondingly.

However, as described above, Plaintiff's Product is a beauty instrument which gives an esthetic action by pressing the pair of rolling portions to the skin and rotating it so as to pick up the skin and thus, the portion having a great attraction for customers in Plaintiff's Product is found to be the structure of the rolling portion, and as in the aforementioned A, Plaintiff's Product includes a solar panel so as to generate a microcurrent, whereby the attraction for customers is found to be enhanced. From these circumstances, it cannot be considered that the Present Feature Portion contributes to all the profits by the sales of Plaintiff's Product and thus, it is not reasonable to find that the total amount of the marginal profit obtained by sales of Plaintiff's Product is the lost profit of Plaintiff and thus, the aforementioned actual presumption should be partially overturned in Plaintiff's Product.

And by comprehensively considering the circumstances appearing in this case such as the positioning of the Present Feature Portion held in the above in Plaintiff's Product, features provided in Plaintiff's Product other than the Present Feature Portion, and the attraction for the customer thereof, it is reasonable to admit that a degree of the overturning is approximately 60% of the total.

In this point, Defendant of the first instance alleges that the ratio of the manufacturing cost of the bearing in the manufacturing cost of the entire Plaintiff's Product should be the degree of contribution, but the aforementioned overturning of presumption is made by paying attention to the degree of contribution of the Present Feature Portion to the profit by the sales of Plaintiff's Product and should not be made only by the ratio of the manufacturing cost of the portion. Moreover, Defendant of the first instance alleges that, since the function for preventing removal of the roller is insufficient in Plaintiff's Product, the degree of contribution of the bearing is low, but it cannot be found that the function for preventing removal of the roller in Plaintiff's Product is insufficient from Exhibit Otsu 138 (description in the blog related to Plaintiff's Product) used by Defendant of the first instance as the ground, and there is no other evidence sufficient to admit the fact. Thus, none of the aforementioned

allegations can be employed.

As described above, in calculation of the "amount of profit per unit" from Plaintiff's Product, it is reasonable to deduct approximately 60% from 5,546 yen which is the amount of the marginal profit of the entire Plaintiff's Product, and the amount of the profit per unit from Plaintiff's Product is 2,218 yen (5,546 yen × 0.4 ≈ 2,218 yen).

(4) Amount proportionate to ability to work

Article 102, paragraph (1) of the Patent Act provides limitation that the amount of damage suffered by patentee or the like is not the total amount of the amount obtained by multiplying the transferred quantity of the infringer by the amount of profit per unit from the product of the patentee or the like as in the aforementioned (1) but within the limits of an amount proportionate to the ability of the patentee or the like to work the patented invention, and this "ability to work" only needs to be a potential ability, and it should be interpreted that the ability to work exists even in the case where the number of products corresponding to the sales quantity of the infringement product can be supplied by a method of production subcontracting or the like, and the burden of allegation/proof resides on the patentee side.

And as in the aforementioned (3)A, since it can be presumed that Plaintiff of the first instance has the ability to supply extra products of approximately 30,000 units to the average sales quantity per month, it is reasonable to find that Plaintiff of the first instance had the ability to additionally sell Plaintiff's Product in the quantity of approximately 20,000 units on a monthly average within this extra product supply ability.

Therefore, it is found that Plaintiff of the first instance had the ability to sell Plaintiff's Product in the quantity of Defendant's Product sold by Defendant of the first instance during the period of the present infringement.

(5) Circumstances due to which Plaintiff of the first instance has been unable to sell

A. As in the aforementioned (1), the proviso to Article 102, paragraph (1) of the Patent Act provides that if there are circumstances due to which the patentee would have been unable to sell a number of products equivalent to all or part of number transferred (hereinafter, referred to as the "circumstances due to which sales would have been impossible"), the amount according to a number equivalent to the circumstances due to which the sales could not have been made shall be deducted, and if the infringer alleges/proves the circumstances found to be the circumstances due to which sales could not have been made and an amount according to the number proportionate to the circumstances, the amount according to the number of products is deducted from the amount of damage found by the main text of the paragraph.

And the "circumstances due to which sales would have been impossible" refer to the circumstances hindering the corresponding cause-effect relations between the infringement and the sales decrease of the product of the patentee and the circumstances such as [i] presence of a difference in the business forms, prices, and the like between the patentee or the like and the infringer (non-identicality of the market); [ii] presence of competitive products in the market; [iii] sales efforts (brand strength, advertisement) of the infringer; and [iv] presence of differences in performances of the infringement product and the product of the patentee (features other than the patent invention such as functions, designs, and the like) should fall under them.

B. Hereinafter, the circumstances alleged by the Defendant of the first instance as those due to which sales could have been impossible will be examined.

(a) Defendant of the first instance alleges the difference in the prices between Plaintiff's Product and Defendant's Product and the difference in vendors as the circumstances due to which sales could not have been made

a. In this case, as in the aforementioned (2)C and (3)A, Plaintiff's Product is sold at major mail-order companies and department stores at the price of 23,800 yen or close to that, while Defendant's Product is sold at the price of approximately 3,000 yen to 5,000 yen at discount stores and variety shops, and in view that Plaintiff's Product is a relatively expensive beauty instrument as above, while Defendant's Product is sold at an inexpensive price at approximately one-eighth to one-fifth of the price of Plaintiff's Product, it cannot be necessarily considered that those who purchased Defendant's Product would not purchase Plaintiff's Product if there had not been Defendant's Product. Therefore, the aforementioned difference in the sales price can be found as the circumstances due to which sales could not have been made.

And since the price difference between Plaintiff's Product and Defendant's Product is not small, the quantity corresponding to the circumstances due to which sales could not have been made by presence of the circumstances is found not to be small.

On the other hand, the both products are beauty instruments, and in view of the property of a product as the beauty instrument, it should be presumed that some of the consumers do not put emphasis on the price and would purchase an inexpensive product, if any, but if there is no inexpensive product, not a small number of the consumers would purchase an expensive product. Moreover, as in the aforementioned (3)A, Plaintiff's Product has the surface of the roller applied with platinum coating, and a solar panel is mounted so as to generate microcurrent and thus, the quality should be higher than Defendant's Product without such equipment and thus, even though Plaintiff's Product has the sales price of approximately 24,000 yen, it can take in a

certain number of the consumers of Defendant's Product at the sales price of approximately 3,000 to 5,000 yen. As described above, it cannot be found that the quantity corresponding to the circumstances due to which sales could not have been made because of the presence of the price difference between Plaintiff's Product and Defendant's Product mounts to a considerable quantity.

b. As described above, the difference in prices between Plaintiff's Product and Defendant's Product could influence purchase motivation of the consumers, but such an experimental rule that those who would purchase a product at major mail-order companies and department stores would not purchase a product at discount stores and variety shops could not be found to exist and apart from the price difference, it cannot be found that the difference in the aforementioned sales forms between Plaintiff's Product and Defendant's Product influences the purchase motivation of the consumers, and it should be considered that the difference in the sales form cannot be found as the circumferences due to which sales could not have been made.

(b) Defendant of the first instance alleges the presence of a large number of competitive products as the circumstances due to which sales could not have been made.

At the point of time of April in 2019, at least 29 kinds of products are found to be sold as the product of the types similar to Plaintiff's Product and Defendant's Product (Exhibit Otsu 176, entire import of oral argument), but in the market, it is not enough to find that the products in a competitive relation with Plaintiff's Product are sold during the present infringement period (December 4, 2015 to May 8, 2017) on the evidences of this case and thus, this point cannot be found to be the circumstances due to which sales could not have been made.

(c) Defendant of the first instance alleges that Present Invention 2 is the invention for the bearing, and the manufacturing cost of the bearing in Defendant's Product is only a small part of the entire manufacturing cost and thus, the bearing is similar to an accessory as the circumstances due to which sales could not have been made.

However, the aforementioned circumstances that Present Invention 2 is the invention characterized by a part of the beauty instrument has been already considered in calculation of the amount of profit per unit from Plaintiff's Product and thus, it is not necessary to repeatedly consider this as the circumstances due to which sales could not have been made.

(d) Defendant of the first instance alleges that the bearing portion cannot be recognized from an appearance and that there is an alternative art as the circumstances due to which sales could not have been made.

However, the aforementioned circumstances alleged by Defendant of the first

instance are applicable to both Defendant's Product and Plaintiff's Product and thus, it cannot be considered that in the case where there is no Defendant's Product, the demand for Defendant's Product does not go toward Plaintiff's Product due to presence of the circumstances and thus, these circumstances cannot be found to be the circumstances due to which sales could not have been made.

(e) Defendant of the first instance alleges that Plaintiff's Product has a mechanism for generating microcurrent but Defendant's Product does not have such a mechanism as the circumstances due to which sales could not have been made.

It is certain that Plaintiff's Product has the mechanism for generating the microcurrent as in the aforementioned (3)A, while Defendant's Product does not have such a mechanism, but this means that Defendant's Product is poor in attraction to customers in relation to Plaintiff's Product and thus, it cannot be circumstances which defer the demand to go toward Plaintiff's Product if there is no Defendant's Product. Therefore, the aforementioned point cannot be found to be the circumstances due to which sales could not have been made.

(f) Defendant of the first instance alleges the sales efforts of Defendant of the first instance as the circumstances due to which sales could not have been made, but on this evidence, it is not found that Defendant of the first instance made sales efforts to such a degree that is enough to be found as the circumstances due to which sales could not have been made.

C. According to the above, by considering the circumstances held in the aforementioned B(a)a, it is reasonable in this case to find that the quantity corresponding to the circumstances due to which sales could not have been made is approximately 50% of the total.

(6) Whether amount of damage should be decreased by considering contribution degree of Present Invention 2

As in the aforementioned (3) and (5), in calculation of the amount of profit per unit from Plaintiff's Product, by considering the degree of contribution of Present Invention 2 to the profit by the sales of Plaintiff's Product, it is reasonable to deduct 60% from the total amount of the marginal profit of Plaintiff's Product and to deduct 50% from the amount of damage suffered by Plaintiff of the first instance obtained by multiplying the sales quantity of Defendant's Product by the aforementioned amount of profit per unit from Plaintiff's Product in conformity to the proviso to Article 102, paragraph (1) of the Patent Act. Even if the allegation of Defendant of the first instance has a point that the amount of damage should be decreased by considering the rate of contribution of Present Invention 2 to the sales of Defendant's Product separately from these

deductions, there are no provisions approving it and there are no grounds for approving it, either, and thus, such decrease by considering the contribution degree shall not be approved.

(7) Calculation of amount of damage

As described above, the amount of damage of Plaintiff of the first instance under Article 102, paragraph (1) of the Patent Act is 390,060,000 yen (2,218 yen × 351,724 units × 0.5 ≈ 390,060,000 yen) by deducting the portion of the circumstances that approximately 50% of the transferred quantity of 351,724 units of Defendant's Product could not have been sold and by multiplying the sales quantity after the deduction by the profit amount of 2,218 yen per unit of Plaintiff's Product.

Moreover, it is reasonable that lawyer's fees having a considerable causal relation with the infringement of Present Patent Right 2 by Defendant of the first instance are found to be 50,000,000 yen by considering the approved amount, the difficulty degree of this lawsuit, and that the injunction claim by Plaintiff of the first instance are approved.

Therefore, the amount of damage of Plaintiff of the first instance is 440,060,000 yen in total.

No. 5 Conclusion

As described above, the claim by Plaintiff of the first instance from Defendant of the first instance has grounds with the limit of requesting injunction of transfer and the like of Defendant's Product, disposal of Defendant's Product, and payment of damages of 440,060,000 yen and the delay damages at the rate of 5% per annum until completion of each of the payments from June 15, 2016 for 38,100,000 yen in that, from August 26, 2017 for 4,050,000 yen, from November 17 of the same year for 257,850,000 yen, and from May 15, 2019 for 140,060,000 yen, and the remaining has no grounds. The judgment in prior instance partially different from this shall be modified on the basis of the appeal and amendment of claim by Plaintiff of the first instance, the appeal by Defendant of the first instance shall be dismissed, and judged as in the main text.

Intellectual Property High Court, Special Division

Presiding Judge: _____

TAKABE Makiko

Judge: _____

MORI Yoshiyuki

Judge: _____

TSURUOKA Toshihiko

Judge: _____

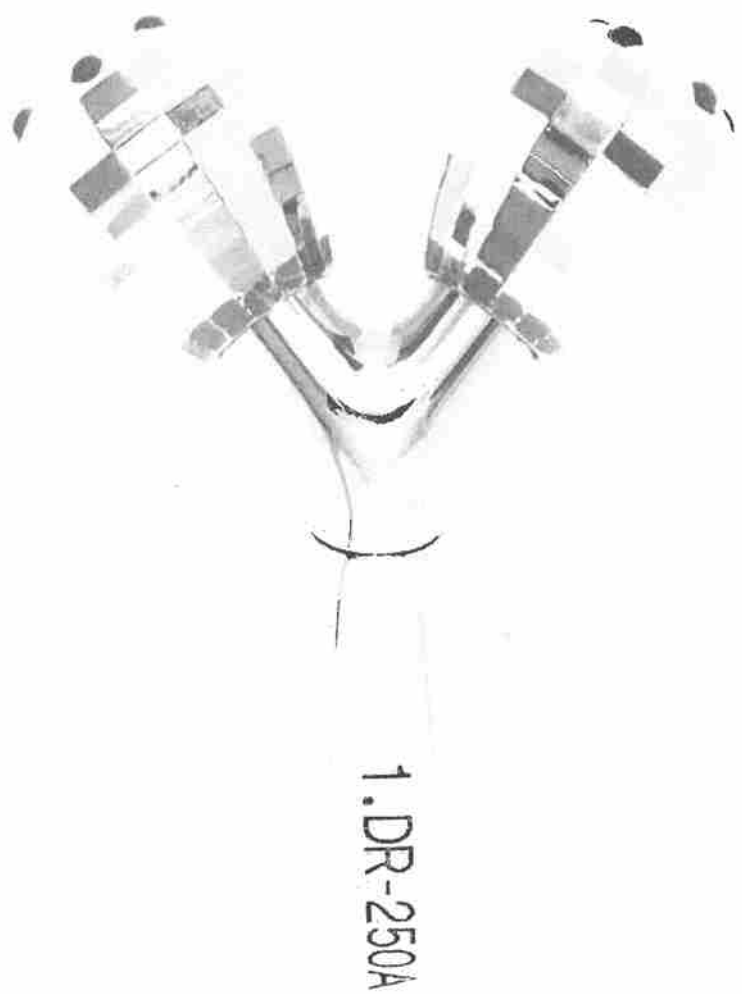
OTAKA Ichiro

Judge: _____

SANO Shin

(Attachment)

Photograph 1



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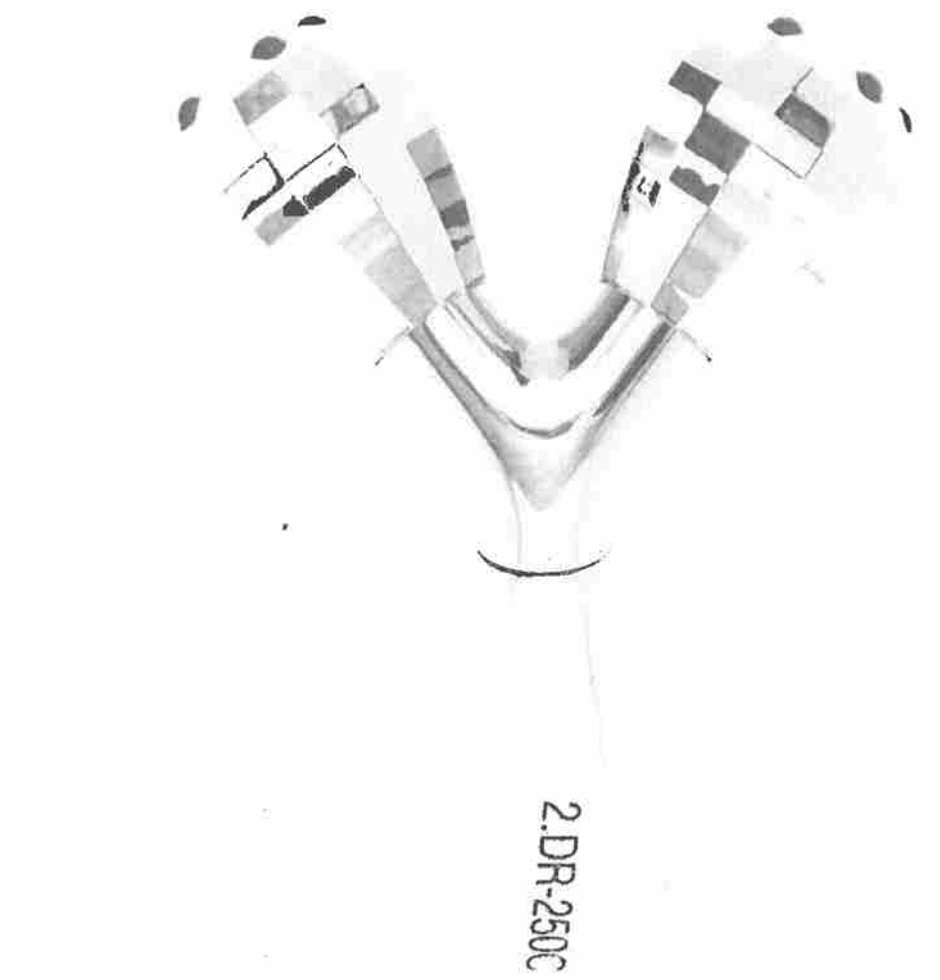
Photograph 2



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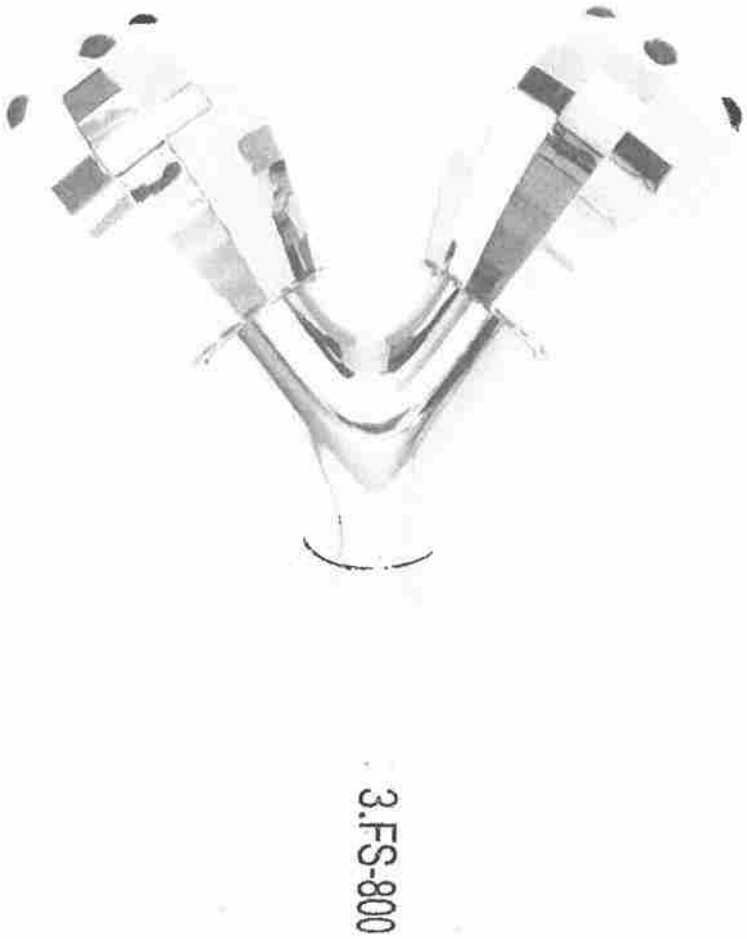
Photograph 3



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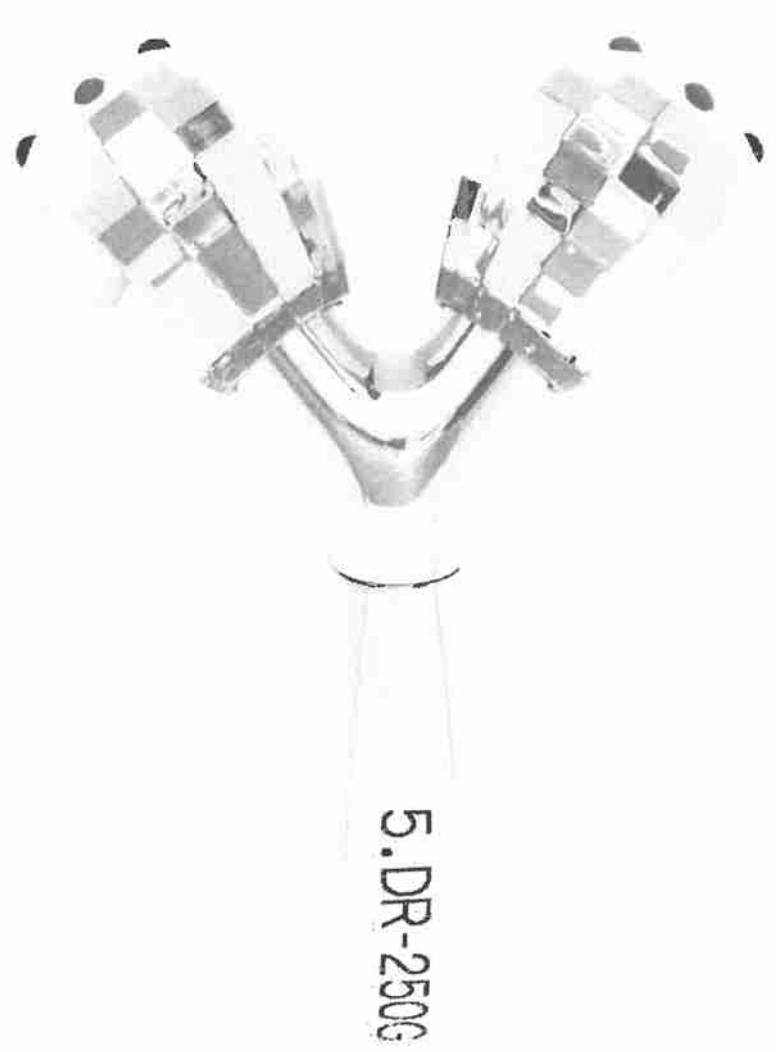
Photograph 4

(Attachment)

Photograph 5



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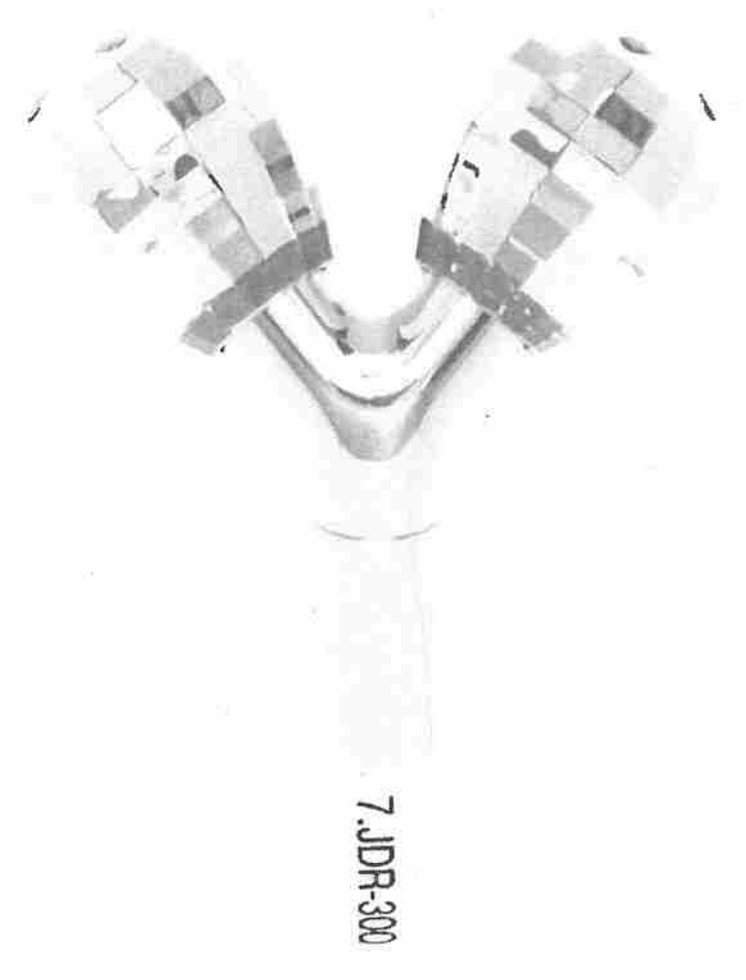
Photograph 6

(Attachment)

Photograph 7



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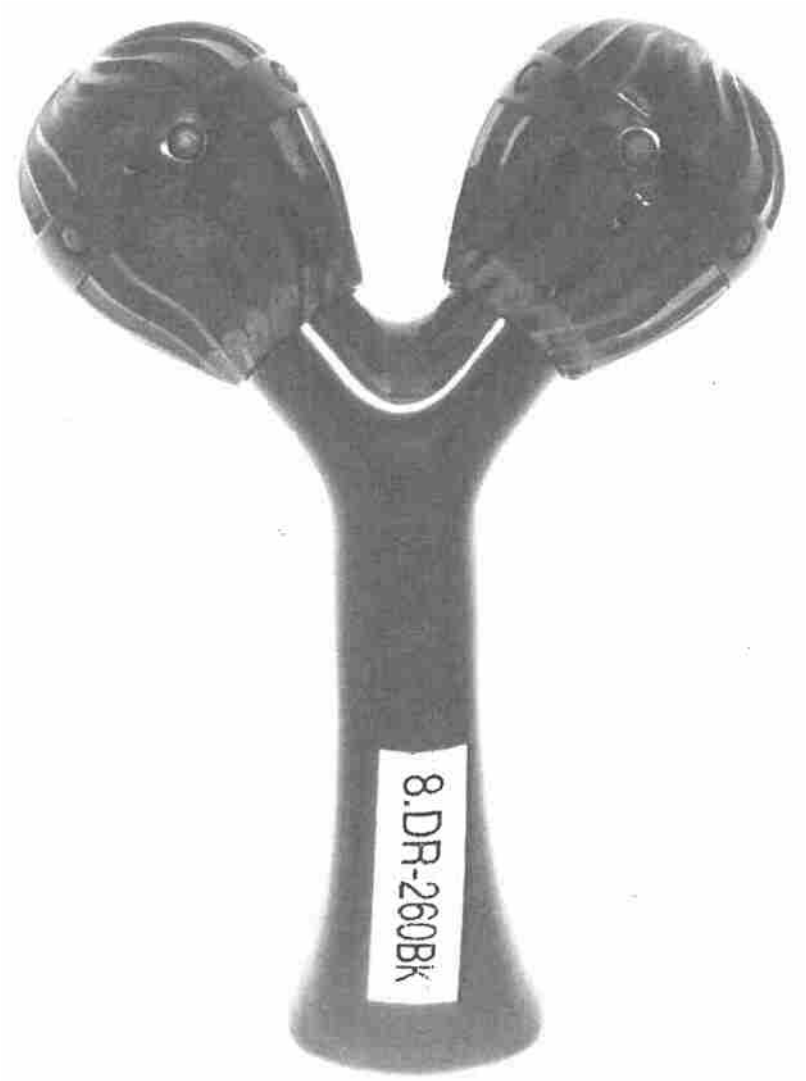
Photograph 8



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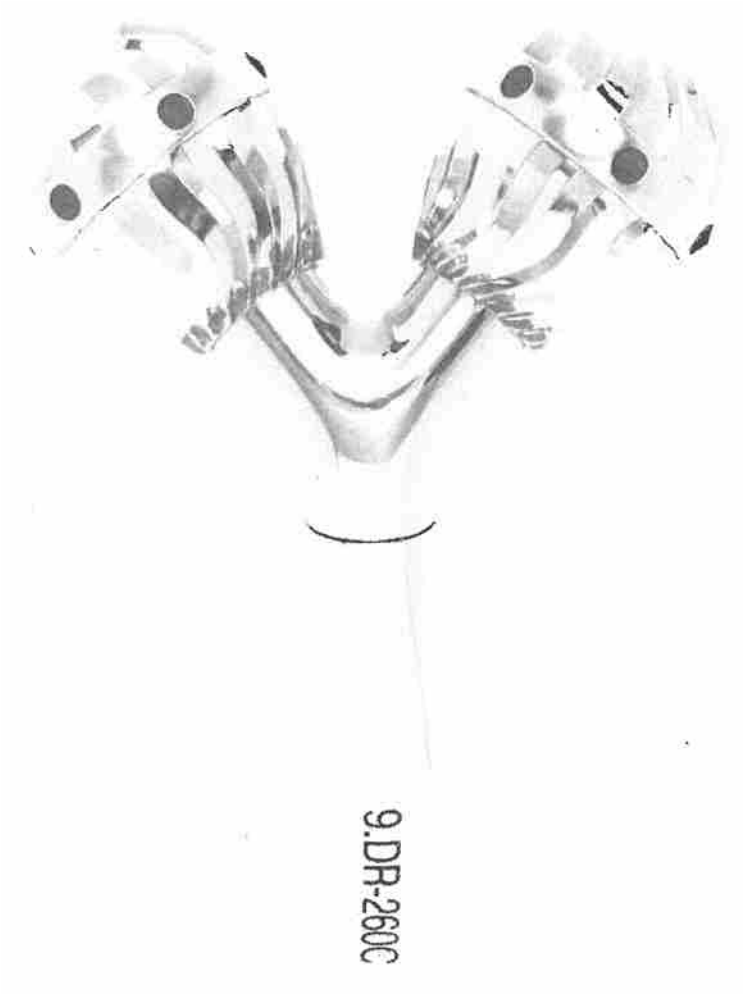
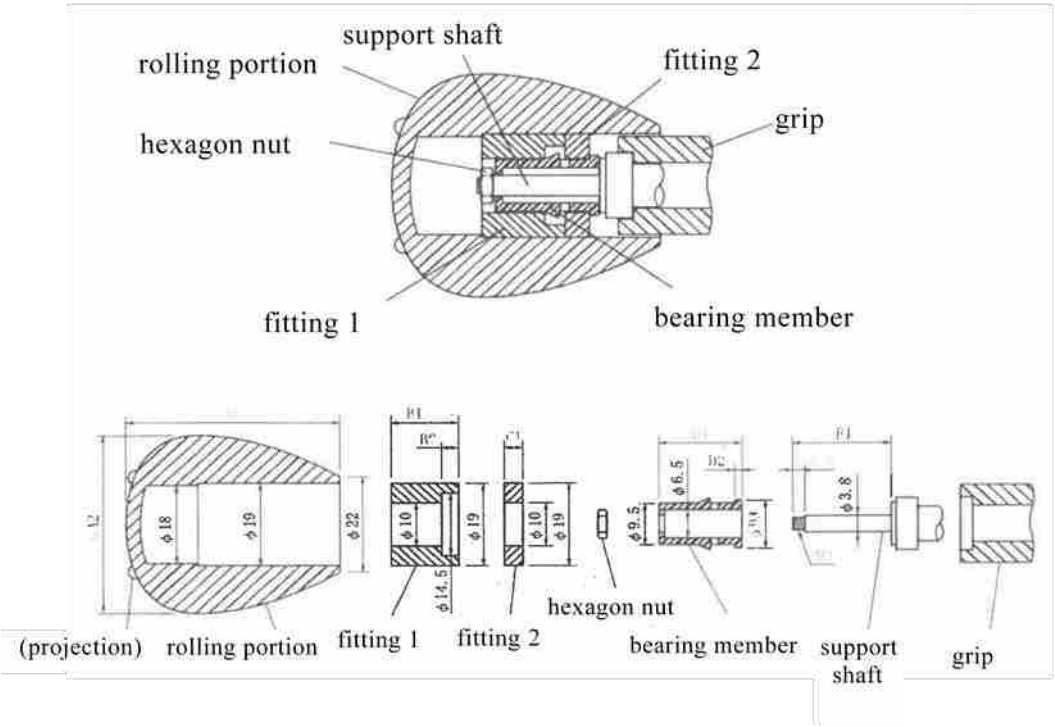
Photograph 9



Attachment

[Reference Figure 1-1]



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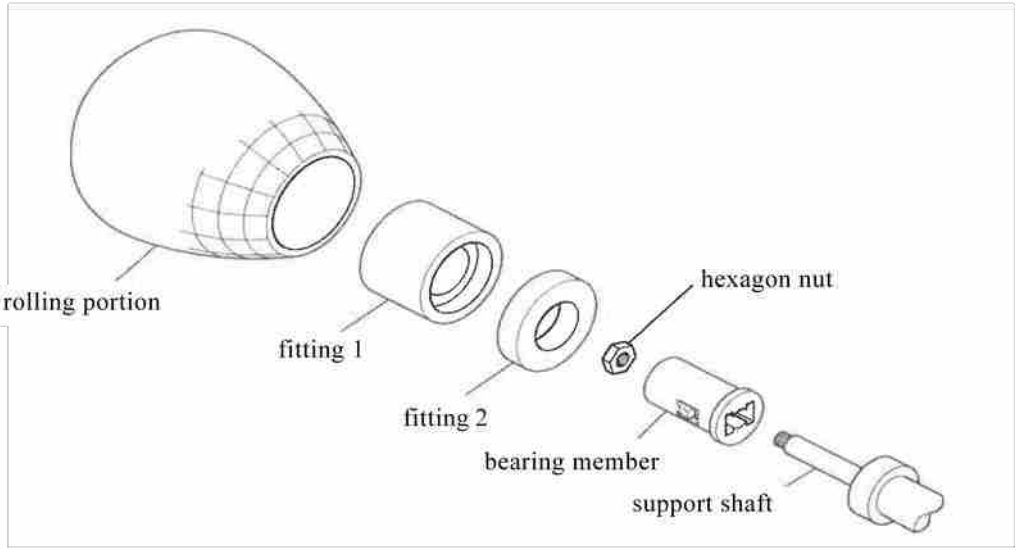
[Reference Figure 1-2]



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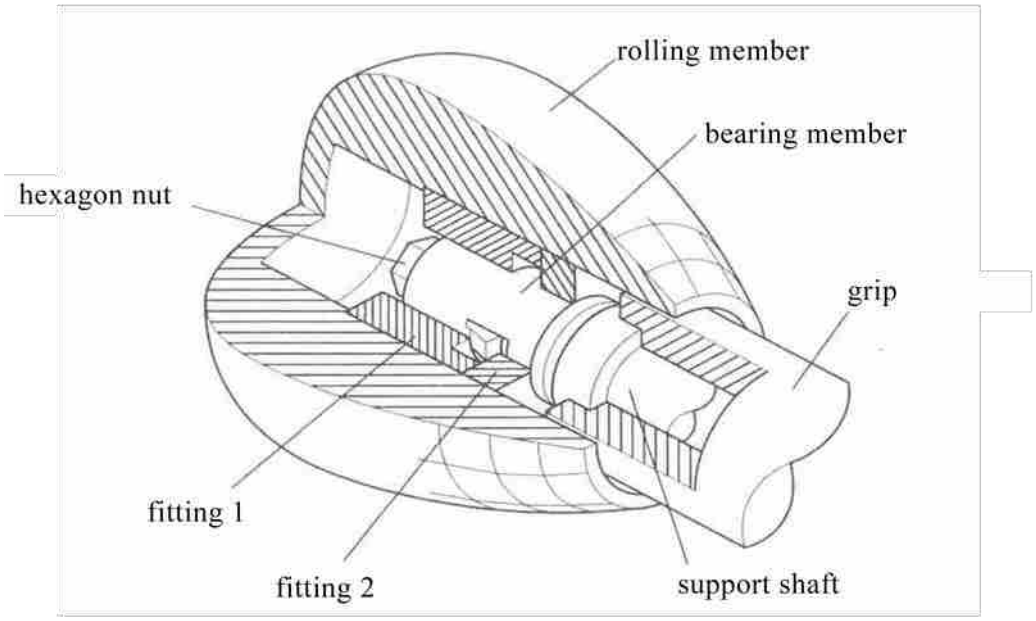
[Reference Figure 1-3]



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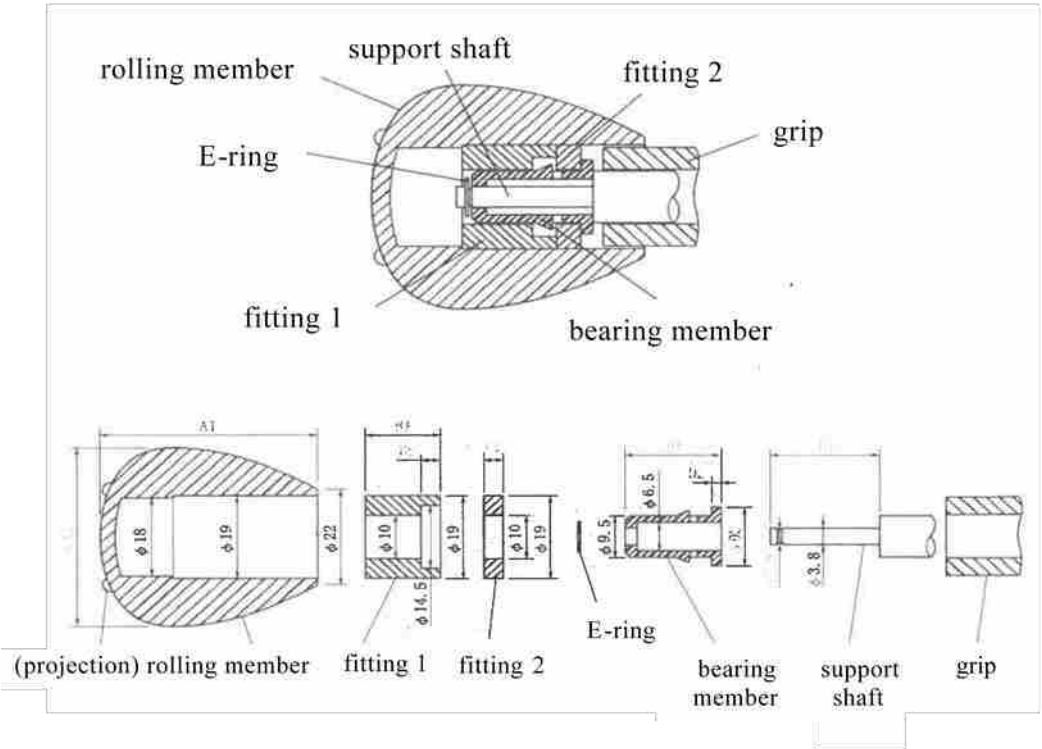
[Reference Figure 2-1]



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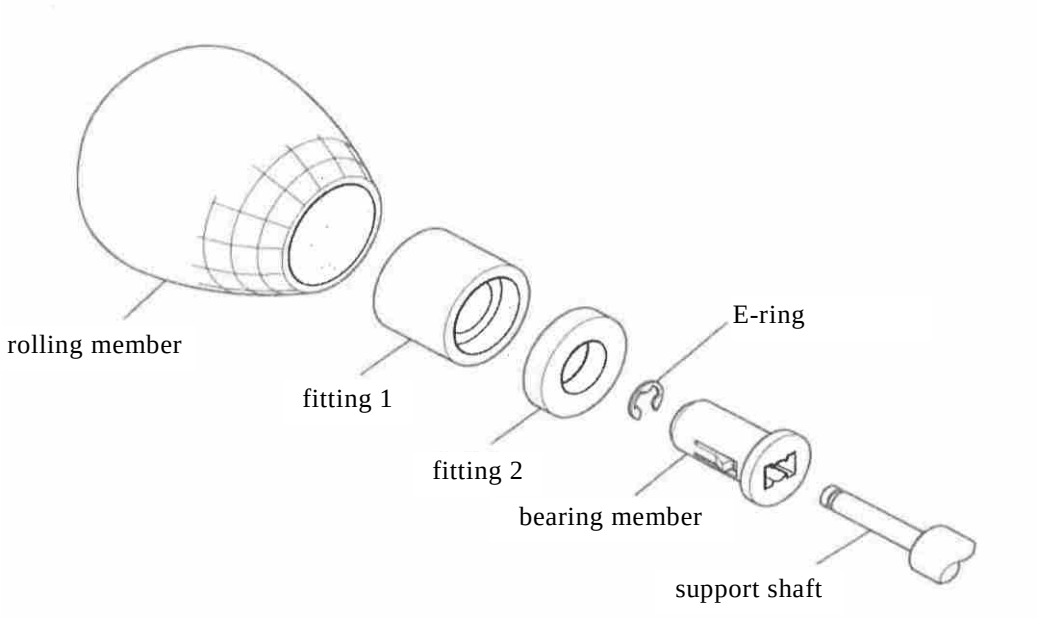
[Reference Figure 2-2]



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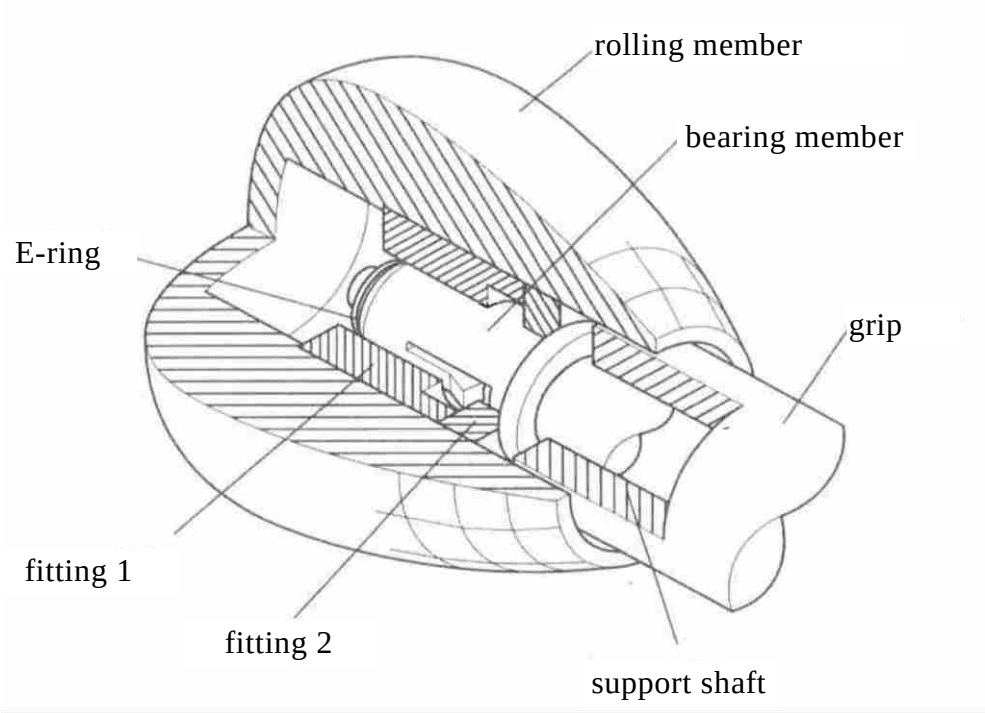
[Reference Figure 2-3]



Attachment "Allegation of parties on issue (2)"

1. Whether Present Patent 1 should be invalidated through a trial for patent invalidation (presence/absence of violation of clarity requirement) (Issue (2)A)

[Allegation of Defendant of first instance]

(1) In Present Description 1, if the shape of the ball is completely circular, the interval D between the outer peripheral surfaces of the pair of balls is located between the diameter portion of the ball and the base-end side end portion of the ball as illustrated in Figure 5, but this limitation of the interval is technically significant for exertion of the effect of picking up the skin.

On the other hand, if the shape of the ball is a balloon shape, it has not only the skin picking-up effect but also the effect of holding the picked-up skin and thus, the limitation of the interval between the balls should be technically significant for exertion of the effect of holding the picked-up skin in addition to the effect of picking up the skin, but Present Description 1 does not have specific numerical value limitation for the interval between the outer peripheral surfaces of the pair of balls when the shape of the ball is a balloon shape.

Therefore, Present Invention 1 violates the clarity requirement (Article 36, paragraph (6), item (ii) of the Patent Act).

(2) Plaintiff of the first instance alleges that the interval between the outer peripheral surfaces of the pair of balls is the smallest distance between the pair of balls.

However, Present Description 1 does not have description making such specification. Moreover, even if the interval between the outer peripheral surfaces of the pair of balls is the smallest distance between the pair of balls, if the shape of the ball is a balloon shape, it is not technically clear whether the effect of holding the picked-up skin is exerted by setting the interval between the outer peripheral surfaces of the pair of balls to 10 to 13 mm.

[Allegation of Plaintiff of first instance]

(1) It is self-obvious that wording interpretation of the "interval between the outer peripheral surfaces of the pair of balls" in Present Invention 1 is the interval of the portion where the interval between the pair of balls is the smallest, and Figure 5 in Present Description 1 also describes as such.

(2) In Present Description 1, to hold the picked-up skin means that the skin can be picked up (picking-up is not released) by the portions.

In the ball having the shape in Figure 8 of Present Description 1, too, the skin is picked up from the distal end portion of the ball to the base end side which is the portion

with the smallest ball interval, but since the ball portion contributing to the picking-up of the skin is longer as compared with the ball with the shape in Figure 5, the picked-up state of the skin can be held, and Present Description 1 describes that.

As described above, the picking-up of the skin is continuously performed from the distal end side to the smallest interval portion of the balls with both the ball shape in Figure 5 and the ball shape in Figure 8 of Present Description 1, and the limitation on specific numerical value due to the shape of Figure 8 is not needed.

(3) Therefore, Present Invention 1 does not violate the clarity requirement.

2. Whether Present Patent 1 should be invalidated through a trial for patent invalidation (presence/absence of lack of inventive step with the Exhibit Otsu 50 document as the primarily cited reference) (issue (2)B)

[Allegation of Defendant of first instance]

(1) French Gazette No. 2891137 published on March 30, 2007 (Exhibit Otsu 50 document) describes the following invention (hereinafter, referred to as the "Exhibit Otsu 50 invention alleged by Defendant of the first instance") (drawings of the working example of the Exhibit Otsu 50 document are illustrated below.).

"A massaging tool in which a pair of balls (2) is supported at an interval from each other and rotatably around a shaft, respectively, by a center handle (1) having an arbitrary shape, in which an axis of the ball (2) is configured with a certain angle with respect to a center line of the center handle (1) so that the axis of the ball (2) can maintain the certain angle with respect to the skin surface during a reciprocating operation, an opening angle of the shafts of the pair of balls (2) is set to 65 to 80 degrees, a diameter of each of the pair of balls (2) to 2 to 8 cm, the ball (2) is supported by the shaft in a penetrating state, and when the handle (1) is gripped and inclined so as to put the two balls (2) on skin (4), and a tensile force is applied, these balls (2) collect the skin restricted and sandwiched between the balls (2)"

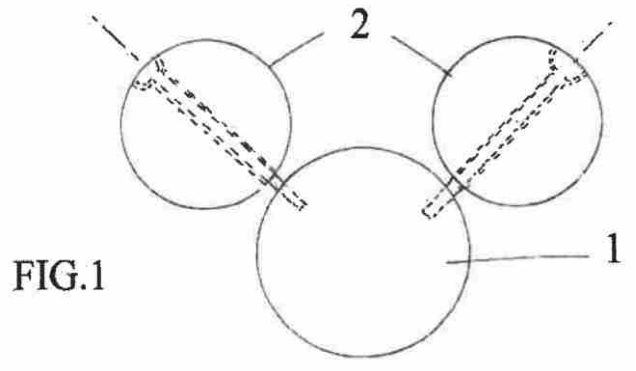
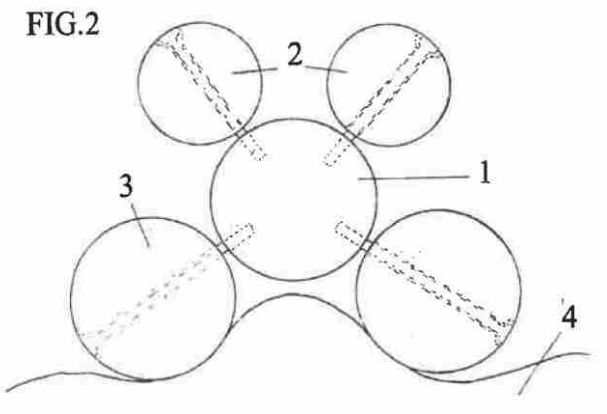


FIG.1

FIG.2



(2) Common Feature and Different Features

The Common Feature and Different Features between Present Invention 1 and the Exhibit Otsu 50 invention alleged by Defendant of the first instance are as follows.

A. Common Feature

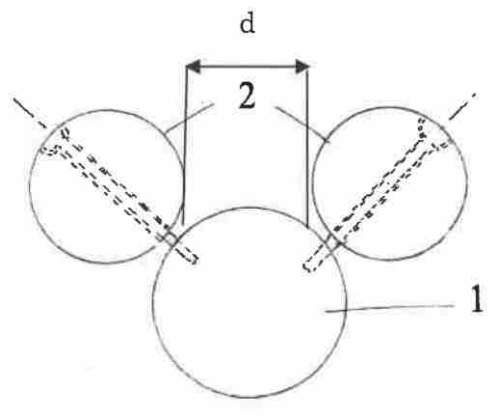
"A beauty instrument in which a pair of balls is supported on a distal end portion of a handle at an interval from each other and rotatably around one axis, respectively, characterized in that the axis of the ball is constituted to be inclined forward with respect to a center line of the handle so that the axis of the ball can maintain a certain angle with respect to a skin surface during a reciprocating operation, an opening angle of a pair of ball support shafts is set to 65 to 80 degrees, and the balls are supported by the support shaft and are constituted such that the skin is picked up by pressing the outer peripheral surface of the ball to the skin and moving it from the distal end of the handle toward a base end direction"

B. Different Features

(a) Different Feature 1

In the Exhibit Otsu 50 invention alleged by Defendant of the first instance, the diameter of each of the pair of balls (2) is specified as 2 to 8 cm, but the interval between the outer peripheral surfaces of the balls (2) is not specified, while in Present Invention 1, the interval between the outer peripheral surfaces of the pair of balls is limited to 10 to 13 mm

The interval between the outer peripheral surfaces of the pair of balls (2) in the Exhibit Otsu 50 invention alleged by Defendant of the first instance is the interval d in the following drawing.



(b) Different Feature 2

The ball (2) in the Exhibit Otsu 50 invention alleged by Defendant of the first instance is supported by the shaft in the penetrating state, while the ball in Present Invention 1 is supported by the ball support shaft through the bearing member in a non-penetrating state.

(3) How easily the Different Features could have been conceived of

A. Different Feature 1

(a) U.S. Patent No. 2641256 (Exhibit Otsu 154-1, hereinafter, referred to as the "Exhibit Otsu 154 document") published on June 9, 1951 describes the following art (hereinafter, referred to as the "Exhibit Otsu 154 art").

[i] When a pair of rollers rotated appropriately is used for winding up the skin, it is appropriate to have the interval between the pair of rollers at 1/2 inches (=12.7 mm)

[ii] One of the pair of rollers is rotated by power

[iii] In the pair of rollers 13, 15 having a diameter of 2.25 inches (= 57.15 mm), the interval between the roller 13 rotated once in 1 second and the roller 15 rotated freely is set to 1/4 inches or 1/2 inches (=12.7 mm)

(b) The Exhibit Otsu 50 invention alleged by Defendant of the first instance and the Exhibit Otsu 154 art not only have common features on the structure and the function and effect of picking up the skin by using the pair of spherical rollers rotated around shafts but are also in common in the diameter of the spherical rollers in use.

And for the Exhibit Otsu 154 art, a motor is not indispensable.

Therefore, there is sufficient motivation to apply [i] of the Exhibit Otsu 154 art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance, and when [i] of the Exhibit Otsu 154 art is applied to the Exhibit Otsu 50 invention alleged by Defendant of the first instance, the interval d

between the outer peripheral surfaces of the pair of balls (2) in the Exhibit Otsu 50 invention alleged by Defendant of the first instance can be 12.7 mm.

As a result, by applying the Exhibit Otsu 154 art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance, Different Feature 1 could have been easily conceived of.

B. Different Feature 2

(a) "Croissant" Vol. 35, No. 17, pages 26 to 27 (hereinafter, referred to as the "Exhibit Otsu 30 document") describes the following art (hereinafter, referred to as the "Exhibit Otsu 30 art").

"A beauty instrument having a pair of spherical balls supported rotatably in a non-penetrating state around a pair of shafts mounted at a distal end of a handle, capable of picking up the skin by the pair of balls"

(b) Well-known art

The Exhibit Otsu 45 document, the Exhibit Otsu 193 document, and Unexamined Patent Application Publication No. 2010-131090 (Exhibit Otsu 192, hereinafter, referred to as the "Exhibit Otsu 192 document") describe that "the rotary body of the beauty instrument is rotatably supported by the shaft through the bearing member in a non-penetrating state", and the art was a well-known art at the time of filing of Present Patent 1.

(c) The Exhibit Otsu 50 invention alleged by Defendant of the first instance and the Exhibit Otsu 30 art have common features in the structure and function and effect, and there is motivation to apply the Exhibit Otsu 30 art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance.

And as in the aforementioned (b), "in a beauty instrument for massaging using a rotary body, to have a structure in which the rotary body is rotatably supported by the shaft through the bearing member in a non-penetrating state" was a well-known art at the time of filing of Present Invention 1.

Therefore, with regard to Different Feature 2, by applying the Exhibit Otsu 30 art and the aforementioned well-known art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance so as to have the structure in which the pair of balls (2) of the Exhibit Otsu 50 invention alleged by Defendant of the first instance is supported as the balls in the non-penetrating state rotatably around the shaft through the bearing member could have been easily conceived of.

C. As a result, Present Invention 1 could have been easily made on the basis of the Exhibit Otsu 50 invention alleged by Defendant of the first instance, the Exhibit Otsu 154 art, the Exhibit Otsu 30 art, and the well-known art.

(4) Allegation of Plaintiff of first instance

A. Different Feature A

Plaintiff of the first instance alleges that, in the invention described in the Exhibit Otsu 50 document, the pair of balls (2) is supported by the handle (1), but it is not clear whether they are supported at the "distal end" thereof.

However, in a beauty instrument or a massaging tool, to have the structure in which the pair of rotary bodies is supported at the distal end portion of the handle is a well-known art (Exhibits Otsu 24 to 31 [including branch numbers.], the Exhibits Otsu 44, 45).

And the Exhibit Otsu 50 document describes that "the handle can have a shape of a ball or any other arbitrary shapes." (Exhibit Otsu 50-2, page 2, lines 19 to 20), and with regard to Different Feature A, there is motivation to apply the well-known art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance.

Therefore, to have the structure in which the pair of balls (2) is supported by the distal end portion of the handle by applying the handle of the well-known art for the handle of the Exhibit Otsu 50 invention alleged by Defendant of the first instance is easy.

B. Different Feature B

Plaintiff of the first instance alleges that, in the invention described in the Exhibit Otsu 50 document, since the center line of the handle (1) cannot be specified, there is no motivation leading to the structure in which the axis of the ball (2) is inclined forward with respect to the center line of the handle (1), and the structure in which the axis of the ball (2) is made to maintain a certain angle with respect to the skin surface during the reciprocating operation could not have been conceived of, either.

However, using a rod-shaped handle by which the center line can be conceptualized in a beauty instrument or a massaging tool is a well-known art (Exhibits Otsu 24 to 31 [including branch numbers.], Exhibits Otsu 44, 45).

And the Exhibit Otsu 50 document describes that "the handle can have a shape of a ball or any other arbitrary shapes." (Exhibit Otsu 50-2, page 2, lines 19 to 20), and with regard to Different Feature B, there is motivation to apply the handle of the well-known art for the handle of the Exhibit Otsu 50 invention alleged by Defendant of the first instance.

Moreover, when the handle of the well-known art is applied to the Exhibit Otsu 50

invention alleged by Defendant of the first instance, the pair of balls (2) is supported at the distal end portion of the handle, and in that case, in the Exhibit Otsu 50 invention alleged by Defendant of the first instance, since the shaft of the ball (2) protrudes from the handle, such a structure that the axis of the ball (2) is inclined forward with respect to the center line of the handle, for example, is obtained, and in that case, it is naturally constituted so that the axis can maintain a certain angle with respect to the skin surface as in the Exhibits Otsu 24-1 and Otsu 25-1.

Therefore, with regard to Different Feature B, having the structure in which the axis of the ball (2) is inclined forward with respect to the center line of the handle (1) so that the axis of the ball (2) can maintain the certain angle with respect to the skin surface during the reciprocating operation by applying the well-known art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance could have been easy for a person ordinarily skilled in the art.

C. Different Feature 1 and Different Feature 2'

Plaintiff of the first instance alleges that Different Feature 1 and Different Feature 2' have correlation on the ground of the judgment of Other Lawsuit 1 and to grasp them as different features individually is unreasonable.

However, since the primarily cited reference in the judgment in Other Lawsuit 1 is not the invention described in the Exhibit Otsu 50 document, the different features between Present Invention 1 and the invention described in the Exhibit Otsu 50 document cannot be argued on the ground of the aforementioned judgment.

D. Different Feature 1

(a) Plaintiff of the first instance alleges that, since the Exhibit Otsu 154 art does not exert the function of picking up the skin by the roller and is different in function from the invention described in the Exhibit Otsu 50 document in which the roller sandwiches the skin, there is no motivation for combination.

However, the Exhibit Otsu 154 art is to lift up the flesh of a patient by a method of sandwiching an underlying tissue, massaging and pulling it (Exhibit Otsu 154-2, page 2, lines 15 to 16).

And the skin in Present Invention 1 refers to the skin and the subcutaneous fat below that, and the underlying tissue referred to in the Exhibit Otsu 154 art is also the tissue including the subcutaneous fat.

Moreover, since the muscle is present below the subcutaneous fat, when the subcutaneous fat is picked up, it is natural that the muscle is also picked up, and the function and effect of the Exhibit Otsu 154 art

and the function and effect of Present Invention 1 are substantially the same.

Therefore, the allegation of Plaintiff of the first instance has no grounds.

(b) Plaintiff of the first instance alleges that, since the Exhibit Otsu 154 art is based on use of a motor, there is no motivation to apply the Exhibit Otsu 154 art to the invention described in the Exhibit Otsu 50 document in which the roller is rotated by the user's hands.

However, since rotation speeds of the Exhibit Otsu 50 invention alleged by Defendant of the first instance and the Exhibit Otsu 154 art are close, even if the Exhibit Otsu 154 art is actively rotated by a driving roller, the function and effect given to the human skin is similar to that of the Exhibit Otsu 50 invention alleged by Defendant of the first instance, and there can be motivation to apply the Exhibit Otsu 154 art to the Exhibit Otsu 50 invention alleged by Defendant of the first instance in which the roller is rotated manually.

(c) Plaintiff of the first instance alleges that, on the ground that the rotating direction of the roller in the Exhibit Otsu 154 art is not clear, there is no motivation to combine it with the invention described in the Exhibit Otsu 50 document.

However, in the Exhibit Otsu 154 document, it is explicitly described that the flesh of the patient is lifted up, massaged, and pulled, and in the well-known art illustrated in Exhibits Otsu 24 to 31 [including branch numbers], and Exhibits Otsu 44 and 45, the art for picking up the skin by rotating the two rollers in the directions opposite to each other is disclosed and thus, it is self-obvious that, in the Exhibit Otsu 154 art, too, similarly to the well-known art, one of the rollers is rotated as the driving roller as the pair of rollers are rotated in the directions opposite to each other.

(d) Plaintiff of the first instance alleges that, if the structure of the roller in the Exhibit Otsu 154 art is applied to the ball (2) of the invention described in the Exhibit Otsu 50 document, one of the balls (2) is driven by a motor, which is not free rotation, whereby the "bearing member" for smoothening the free rotation of the ball (2) in the invention described in the Exhibit Otsu 50 document is no longer needed, and there is a hindrance.

However, Defendant of the first instance alleges that to apply 1/2 inch which is an interval between the outer peripheral surfaces of the pair of rollers disclosed in the Exhibit Otsu 154 document to the Exhibit Otsu 50 invention alleged by Defendant of the first instance is easy, but does not allege that the roller driven by the motor in the Exhibit Otsu 154 art is to be applied and thus, the aforementioned allegation of Plaintiff of the first instance has no grounds.

E. Different Feature 2'

Plaintiff of the first instance alleges that it is not clear in the Exhibit Otsu 30 document whether the ball is supported by the ball support shaft.

However, in the Exhibit Otsu 30 document, the fact that the ball is rotatably supported by using the support shaft can be confirmed.

From the technical common sense at the time of filing of Present Patent 1, the structure in which the ball is rotatably supported by using the support shaft is a self-evident matter, and creating means for rotatably supporting the ball without the support shaft is extremely difficult.

Therefore, the aforementioned allegation of Plaintiff of the first instance has no grounds.

[Allegation of Plaintiff of first instance]

(1)The Exhibit Otsu 50 document describes the following invention (hereinafter, referred to as the "Exhibit Otsu 50 invention alleged by Plaintiff of the first instance").

"A manual massaging tool in which a pair of balls (2) is supported by a handle (1) at an interval from each other and rotatably around a shaft, respectively, in which an opening angle of the shafts of the pair of balls (2) is set to 70 to 100 degrees, a diameter of each of the pair of balls (2) to 2 to 8 cm, the ball (2) is supported by the shaft of the ball (2) in a penetrating state without a bearing member, and when the handle (1) is gripped and inclined so as to put the two balls (2) on skin (4), and a tensile force is applied, these balls (2) collect the skin restricted and sandwiched between the balls (2)".

(2) There are the following different features between Present Invention 1 and the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance.

A. Different Feature A

In Present Invention 1, the pair of balls is supported by the "distal end of the handle", while in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, the pair of balls (2) is supported by the "handle (1)", but whether it is

supported at the "distal end" thereof is not clear.

B. Different Feature B

In Present Invention 1, the "axis of the ball is constituted to be inclined forward with respect to the center line of the handle so that the axis of the ball can maintain a certain angle with respect to the skin surface during the reciprocating operation", while in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, since the center line of the handle (1) cannot be specified, it is not clear whether the axis of the ball (2) is inclined forward with respect to the center line of the handle (1), and it is not clear whether the axis of the ball (2) can maintain the certain angle with respect to the skin surface during the reciprocating operation.

C. Different Feature 1

In Present Invention 1, "the interval between the outer peripheral surfaces of the pair of balls is set to 10 to 13 mm", while in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, although "the diameter of the pair of balls (2) is set to 2 to 8 cm", the interval between the outer peripheral surfaces of the pair of balls (2) is not clear.

D. Different Feature 2'

The ball in Present Invention 1 is "supported by the ball support shaft through the bearing member in a non-penetrating state", while the ball (2) in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance is "supported by the shaft of the ball (2) without the bearing member in the penetrating state".

(3) How easily the different features could have been conceived of

A. Since Different Feature 1 and Different Feature 2' have correlation, how easily they could have been conceived of should not be determined individually. The judgment in Other Lawsuit 1 is also held as such.

B. Different Feature A

The Exhibit Otsu 50 document has the description that the shape of the handle (1) "can be a shape of a ball or any other arbitrary shapes", but there is no description on the positional relations between the handle (1) and the ball (2).

And the "ball" shape is specifically indicated explicitly as the shape of the handle (1), and if the pair of balls (2) is to be supported by the ball-shaped handle (1), it is generally considered that support is made at the center (a position passing through the center) of the ball-shaped handle (1).

Therefore, in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, even if the support position of the ball (2) with respect to the handle

(1) is presumed, it is the center of the handle (1), and the structure in which the pair of balls (2) is supported at the distal end of the handle (1) could not have been conceived of.

Therefore, Different Feature A could not have been easily conceived of.

C. Different Feature B

In the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, the only shape of the handle (1) that can be assumed specifically is spherical, but with this shape, the center line of the handle (1) cannot be specified, and there is no motivation to reach the structure that the axis of the ball (2) is inclined forward with respect to the center line, and the structure in which the relations between the center line of the handle (1) and the axis of the ball (2) is devised so that the axis of the ball (2) can maintain the certain angle with respect to the skin surface during the reciprocating operation could not have been conceived of, either.

Therefore, Different Feature B could not have been easily conceived of.

D. Different Feature 1

(a) The Exhibit Otsu 154 art has a function that the roller winds up the skin and the subcutaneous tissue without sandwiching the skin, massages and pulls it, and from the description of the Exhibit Otsu 154 document that "the roller does not sandwich the skin in use but ... in a way that the subcutaneous tissue is massaged, ... the flesh of the patient is lifted up, massaged, and pulled", to "sandwich the skin (= to pick up the skin)" and "to wind up the subcutaneous tissue, to massage and to pull it" are considered to be different functions.

Therefore, the Exhibit Otsu 154 art is not to exert the function of sandwiching and picking up the skin by the roller, and since the function is different from that of the exhibit Otsu 50 invention alleged by Plaintiff of the first instance in which the roller sandwiches the skin, there is no motivation to combine the Exhibit Otsu 154 art with the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance.

(b) The Exhibit Otsu 154 art is an art in which, on the premise of the massaging device in which the motor is indispensable and one roller is rotated by the motor, the interval between the two rollers is 1/2 inches.

On the other hand, the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance is a roller pushed by the hand and corresponds to the prior art of the Exhibit Otsu 154 art and moreover, the structure is different from that of the Exhibit Otsu 154 art in which the active rotation is made by the

driving roller.

And the interval between the rollers in the Exhibit Otsu 154 art is the interval on the premise that the roller making the active rotation by the driving roller is employed, and there is no motivation to apply only this roller interval to the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance corresponding to the prior art of the Exhibit Otsu 154 art.

(c) In the Exhibit Otsu 154 art, in what direction the roller is rotated is not obvious, and there is no motivation to combine it with the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance in which the two balls (2) are rotated in directions opposite to each other.

(d) When the structure of the roller of the Exhibit Otsu 154 art is applied to the ball (2) of the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, one of the balls (2) is driven by the motor, which no longer makes free rotation.

Then, in the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance, the "bearing member" for smoothening the free rotation of the ball (2) with respect to the shaft is no longer needed, and there is a hindrance in application of the Exhibit Otsu 154 art to the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance.

(e) As described above, Different Feature 1 could not have been easily conceived of.

E. Different Feature 2'

(a) From the description in the Exhibit Otsu 30 document pointed out by Plaintiff of the first instance, presence/absence of the shaft of the ball is not specified, and it is not clear whether or not the ball is supported by the ball support shaft in the non-penetrating state.

Therefore, the Exhibit Otsu 30 document does not disclose the structure of Present Invention 1 related to Different Feature D.

(b) "In the beauty instrument for massaging by using a rotary body, to have the structure that the rotary body is rotatably supported by a shaft through a bearing member in a non-penetrating state" is not well known. Moreover, the arts described in the Exhibit Otsu 45 document, the Exhibit Otsu 193 document, and the Exhibit Otsu 192 document are not the arts for smooth rotation of the roller, and the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance does not have a problem of smooth rotation of the ball and thus, there is no motivation which leads to Present Invention 1 in which

the ball is supported by the ball support shaft through the bearing member in the non-penetrating state for the smooth rotation of the ball by applying each of the aforementioned arts to the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance.

(c) Therefore, Different Feature 2' could not have been easily conceived of.

3. Whether Present Patent 1 should be invalidated through a trial for patent invalidation (presence/absence of lack of inventive step with the Exhibit Otsu 45 document as the primarily cited reference) (issue (2)C)

[Allegation of Defendant of first instance]

(1) The Exhibit Otsu 45 document describes the following invention (hereinafter, referred to as the “Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance").

"In a magnet beautifying roller in which a pair of cylindrical roller portions 5 are supported on a distal end portion of a handle body portion 2 at an interval from each other and rotatably around an axis of a small-diameter portion 4b, the axis of the roller portion 5 is constituted by being inclined at a first angle with respect to a center line of the handle body portion 2 so that the axis of the roller portion 5 can maintain a certain angle with respect to the skin surface during a reciprocating operation, an opening angle of the axes of the pair of small-diameter portions 4b is set to a second angle, the roller portion 5 is supported by the small-diameter portion 4b through a bearing 8 in a non-penetrating state, and since the roller portion 5 is inclined to a front side at the first angle and the second angle is opened, it can touch the skin on the face efficiently, whereby an esthetic effect can be improved"

(2) Common feature and different features

The common feature and different features between Present Invention 1 and the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance are as follows.

A. Common Feature

"A beauty instrument in which a pair of rotary bodies are supported on a distal end portion of a handle at an interval from each other and rotatably around an axis, respectively, in which the axis of the rotary body is constituted to be inclined forward with respect to a center line of the handle so that the axis of the rotary body can maintain a certain angle with respect to a skin surface during a reciprocating operation, an opening angle of the

pair of support shafts is a certain angle, the rotary body is supported by the support shaft through a bearing member, and an outer peripheral surface of the rotary body is pressed onto the skin for massaging"

B. Different features

(a) Different Feature 1

The roller portion 5 of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance has a cylindrical shape and none of a completely circular shape, a balloon shape, an elliptic circular section, and a long circular shape

(b) Different Feature 2

In the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, the opening angle of the axes of the pair of small-diameter portions 4b is a predetermined angle as the second angle, while the opening angle of the pair of ball support shafts of Present Invention 1 is set to 65 to 80 degrees

(c) Different Feature 3

In the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, the interval between the outer peripheral surfaces of the pair of roller portions 5 is not specified at all, while in Present Invention 1, the interval between the outer peripheral surfaces of the pair of balls is specified to 10 to 13 mm

(d) Different Feature 4

In the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, it is not clear whether or not it is constituted such that the skin is picked up by moving from the distal end of the handle body portion 2 to the base end direction.

(3) How easily the differences could have been conceived of

A. Different Feature 1

(a) Application of Exhibit Otsu 30 art

Since the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance and the Exhibit Otsu 30 art have common features in the structure and the purpose of use, there is motivation to apply the Exhibit Otsu 30 art to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance.

Therefore, applying the Exhibit Otsu 30 art to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance so as to have the

structure in which the pair of roller portions 5 of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance are rotatably supported as the ball in the non-penetrating state around the roller support portion through the bearing 8 (bearing member) of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance is easy for a person ordinarily skilled in the art, and Different Feature 1 could have been easily conceived of.

(b) Application of the art described in Unexamined Patent Application Publication No. 2000-24065 (Exhibit Otsu 155, hereinafter, referred to as the “Exhibit Otsu 155 document".)

a. The Exhibit Otsu 155 document describes the following art (hereinafter, referred to as the "Exhibit Otsu 155 art").

"In a massaging tool 1 including a grip portion 4 whose distal end portion B is inclined approximately 20 to 40 degrees as compared with a base-end side linear portion A and a pair of elastic bodies in a non-penetrating state and supported rotatably by a rotary shaft body 8 provided on one end of the grip portion 4, a spherical body may be used instead of a columnar body 3 as the elastic body."

b. Since the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance and the Exhibit Otsu 155 art have the common features in the structure and the purpose of use, there is motivation to apply the Exhibit Otsu 155 art to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance.

Therefore, applying the Exhibit Otsu 155 art to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance so as to have the structure in which the pair of roller portions 5 in the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance are made a spherical body in the non-penetrating state and are supported rotatably around the roller support portion through the bearing 8 (bearing member) of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance is easy for a person ordinarily skilled in the art, and Different Feature 1 could have been easily conceived of.

B. Different Feature 2

In the tool for massaging the skin by using a pair of rotary bodies, to have the opening angle of the axes within a range from 65 to 80 degrees was only

a matter of technical common sense at the time of filing of Present Patent 1 as a design matter (Exhibits Otsu 50-1, Otsu 161, 162).

C. Different Feature 3

The Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance is for generating a function of picking up the skin, and a person ordinarily skilled in the art would select disposition of the spherical body where this function is exerted efficiently, and when the ball of a spherical body in the Exhibit Otsu 154 art is applied to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, the interval of the Exhibit Otsu 154 art (the interval between the outer peripheral surfaces is 1/2 inches (12.7 mm)) is employed.

Therefore, the structure related to Different Feature 3 in which the interval between the balls in the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance which employs the ball of a spherical body is set to 10 to 13 mm could have been easily conceived of.

D. Different Feature 4

The function of picking up the skin when the rotary body is moved so as to be rotated in the beauty instrument using a pair of the rotary bodies was a matter of technical common sense at the time of filing of Present Patent 1 and thus, constitution of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance in which the skin picking-up function is generated similarly to the Present Invention 1 is obvious for a person ordinarily skilled in the art, and Different Feature 4 is not a substantial difference.

E. Therefore, Present Invention 1 could have been easily invented on the basis of the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, the Exhibit Otsu 154 art, the Exhibit Otsu 30 art, and the Exhibit Otsu 155 art.

(4) Allegation of Plaintiff of first instance

A. Plaintiff of the first instance alleges that the opening angle of the axes in the invention described in the Exhibit Otsu 45 document should be found to be 100 to 140 degrees.

However, Claim 1 of the Exhibit Otsu 45 document has description that "a pair of roller holding portions extending from one end of the grip portion so as to be opened at the second angle", and the opening angle of the axes is not limited and thus, the aforementioned allegation of Plaintiff of the first

instance has no grounds.

Even if the opening angle of the axes in the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance is found to be 100 to 140 degrees, the opening angle is conceptualized as the second angle in the Exhibit Otsu 45 document, and the opening angle of the axes at 100 to 140 degrees is not a technical requisite, and to set the opening angle to 80 degrees as described above is a well-known art and thus, to set the opening angle of the axes at 100 to 140 degrees in the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance to 80 degrees to have a range from 65 to 80 degrees is only a design matter.

B. Plaintiff of the first instance alleges that the allegation of Defendant of the first instance on how easily Different Feature 3 could have been conceived of is applicable to so-called "easily conceived of based on the matter which could have been easily conceived of".

However, with regard to Different Feature 1', when the matter described in the Exhibit Otsu 30 document is applied to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance, how to set the interval between the balls needs to be considered as a design matter, but at that time, to set the interval between the balls to 1/2 inches (12.7 mm) on the basis of the Exhibit Otsu 154 document could have been easily conceived of, and such a thought is only applying the Exhibit Otsu 30 art and the Exhibit Otsu 154 art to the Exhibit Otsu 45 invention 1 alleged by Defendant of the first instance in parallel and at the same time, and it is different from the "easily conceived of based on the matter which could have been easily conceived of" that still another secondarily cited reference is applied to the one reached on the basis of a secondarily cited reference.

C. Plaintiff of the first instance alleges that Different Feature 2' and Different Feature 3 are differences related to the opening angle of the support shafts and the interval between the outer peripheral surfaces of the balls in Present Invention 1, and they are closely related to each other and thus, they could not have been easily conceived of on the basis of the different documents.

However, the aforementioned allegation of Plaintiff of the first instance is based on the judgment of Other Lawsuit 1, and the judgment was rendered on the allegation different from the invalidation allegation in this lawsuit and thus, the aforementioned allegation of Plaintiff of the first instance based on the judgment has no grounds.

[Allegation of Plaintiff of first instance]

(1) The Exhibit Otsu 45 document describes the following invention (hereinafter, referred to as the "Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance").

"In a magnet beauty roller in which a pair of cylindrical roller portions (5) are supported on a distal end portion of a handle body portion (2) at an interval from each other and rotatably around an axis of a small-diameter portion (4b), an axis of the roller portion (5) is constituted to be inclined at a first angle with respect to a center line of the handle body portion (2) so that the axis of the roller portion (5) can maintain a certain angle with respect to a skin surface during a reciprocating operation, an opening angle of the axes of the pair of small-diameter portions (4b) is set to 100 to 140 degrees, the roller portion (5) is supported by the small-diameter portion (4b) through a bearing (8) in a non-penetrating state, and the roller portion (5) can be brought into contact with the skin of the face efficiently so as to improve an esthetic effect."

(2) There are following different features between Present Invention 1 and the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance.

A. Different Feature 1'

Present Invention 1 is a "ball", while the roller portion 5 of Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance has a cylindrical shape and is not a ball.

B. Different Feature 2'

In Present Invention 1, the opening angle between the pair of ball support shafts is "65 to 80 degrees", while in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, the opening angle between the axes of the pair of small-diameter portions 4b is "100 to 140 degrees"

C. Different Feature 3

In Present Invention 1, the interval between the outer peripheral surfaces of the pair of balls is set to 10 to 13 mm, while in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, the interval between the outer peripheral surfaces of the pair of roller portions 5 is not specified at all.

D. Different Feature 4'

In Present Invention 1, the skin is picked up by pressing the outer peripheral surface of the ball to the skin and by moving it from the distal end of the handle to the base end direction, while it is not known whether or not the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance is

constituted such that the skin is picked up by moving from the distal end of the handle body portion 2 to the base end direction.

(3) How easily the different features could have been conceived of

A. Different Feature 2' and Different Feature 3 are differences on the opening angle between the support shafts and the interval between the outer peripheral surfaces of the balls in Present Invention 1, and they are in close relation with each other and thus, it cannot be considered that they could have been easily conceived of on the basis of different documents (see the judgment in Other Lawsuit 1).

B. Different Feature 1'

The cylindrical roller portion 5 of the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance is intended to have a favorable contact state with the skin, and the contact state with the skin is largely related to the shape of the roller portion and thus, if the roller portion 5 of the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance is changed from a cylindrical shape to a spherical shape, it is obvious that a contact surface with the skin is reduced, and the contact area is not made favorable.

Therefore, in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, there is no motivation to add the shape change of the roller portion 5, and Different Feature 1' could not have been easily conceived of.

C. Different Feature 2'

(a) The Exhibit Otsu 45 document describes that 100 to 140 degrees is preferable as the opening angle (paragraphs [0011], [0021]), but this is caused by the purpose of the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance that the contact state with the skin is made favorable by using the cylindrical roller (paragraph [0009]).

In the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, in combination with use of the cylindrical roller, the opening angle needs to be set from a viewpoint that the contact state with the skin of the cylindrical surface of the cylindrical roller is made favorable in order to make the contact state with the skin favorable also for the angle of the pair of small-diameter portions and thus, to set the opening angle of the pair of small-diameter portions 4b to a range from 65 to 80 degrees in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance cannot be considered from the purpose, or rather it is likely to contradict the purpose and makes a hindrance in the Exhibit Otsu 45 invention 1

alleged by Plaintiff of the first instance using the cylindrical roller.

Therefore, a person ordinarily skilled in the art who comes into contact with the Exhibit Otsu 45 document might set the opening angle within the range from 100 to 140 degrees as the opening angle in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance on the basis of the explicit description, but could not have been easily conceived of the change of the opening angle to 65 to 80 degrees.

(b) Moreover, 65 to 80 degrees which, is the range of the opening angle of Present Invention 1, and the support on the ball support shaft through the bearing member in the non-penetrating state have a marked effect of contribution to the smooth rotation of the ball.

(c) Therefore, Different Feature 2' could not have been easily conceived of.

D. Different Feature 3

(a) The Exhibit Otsu 154 document has the description that the interval of the roller is 1/2 inches (12.7 mm) and the description that it is 1/4 inches (6.35 mm) mixed, and it is unknown which one is correct and thus, the document cannot be considered to disclose the structure that "the interval between the outer peripheral surfaces of the pair of balls is set to 10 to 13 mm" as a technical matter.

(b) The allegation of Defendant of the first instance is that, in order to reach the structure of Different Feature 3, with the invention described in the Exhibit Otsu 45 document as a starting point, after the change (roller is changed to a spherical body) related to Different Feature 1' on the basis of the Exhibit Otsu 30 art and the like is made, the change is made to the spherical body of the same change spot on the basis of the Exhibit Otsu 154 art. That is, according to the allegation of defendant of the first instance, Different Feature 3 cannot be conceived of only by changing the pair of roller portions 5 in the invention described in the Exhibit Otsu 45 document to a spherical body, but a further change that the interval between the spherical bodies is changed needs to be made, which is applicable to so-called "easily conceived of based on the matter which could have been easily conceived of", and Different Feature 3 could not have been easily conceived of.

(c) As in the aforementioned 2(3)D(a), the Exhibit Otsu 154 art does not exert the function of sandwiching and picking up the skin by the rollers and has a function different from that of the Exhibit Otsu 45 invention 1

alleged by Plaintiff of the first instance and thus, there is no motivation to combine the Exhibit Otsu 154 art with the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance.

(d) As in the aforementioned 2(3)D(b), the Exhibit Otsu 50 invention alleged by Plaintiff of the first instance is a roller pushed by the hand and corresponds to the prior art of the Exhibit Otsu 154 art and moreover, it is different in structure from the Exhibit Otsu 154 art which makes active rotation by the driving roller.

And the roller interval in the Exhibit Otsu 154 art is the interval on the premise that the roller making active rotation by the driving roller is employed, and there is no motivation to apply only this roller interval to the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance corresponding to the prior art of the Exhibit Otsu 154 art.

(e) In the Exhibit Otsu 154 art, in what operation the roller is rotated is not obvious, and there is no motivation to combine it with the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance in which the pair of rollers are rotated in the directions opposite to each other.

(f) When the Exhibit Otsu 154 art is applied to the roller portion 5 of the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, one of the roller portions is driven by the motor and no longer makes free rotation.

Then, in the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance, the bearing for smoothening the free rotation of the roller portion 5 with respect to the small-diameter portion 4b is not needed at all, and the application of the Exhibit Otsu 154 art to the Exhibit Otsu 45 invention 1 alleged by Plaintiff of the first instance generates a new different feature (presence/absence of the bearing member), and combination of the two has a hindrance.

(g) As described above, Different Feature 3 could not have been easily conceived of.