Patent	Date	June 27, 2019	Court	Intellectual Property High Court,
Right	Case number	2019 (Ne)		Fourth Division
		10009		

- A case in which the defendants of an infringement lawsuit alleged defense of invalidity and some of the defendants made a request for an invalidation trial with the invalidation reasons based on the same facts and evidences as in the defense of invalidity, where it is judged that, if the decision of the JPO dismissing the request for an invalidation trial is finalized, maintenance of the allegation of the defense of invalidity by the defendants in the infringement lawsuit contradicts the principle of good faith in the lawsuits and cannot be approved in view of the gist of Article 2 of the Code of Civil Procedure.

Case type: Injunction, etc. Result: Appeal dismissed

References: Articles 104-3, 167 of the Patent Act, Article 2 of the Code of Civil

Procedure

Number of related rights, etc.: Patent No. 4194737

Summary of the Judgment

- 1. This case is a case in which the appellee alleged that manufacture and sales of the defendant's product by the appellants are applicable to indirect infringement of the patent right of Patent No. 4194737 (hereinafter referred to as the "present patent right") of the invention titled "roll paper for medicine packaging" and claimed joint payment of damages under tort.
- 2. The judgment of prior instance (Osaka District Court, 2016 (Wa) 6494/Judgment on December 18, 2018) judged that the manufacture/sales of the defendant's product is applicable to the indirect infringement of the present patent right, expelled all the defenses of invalidity according to the appellants' allegation, and partially admitted the appellee's claim.
- 3. The present judgment dismissed the present appeal. The reasons for that is as follows:
 - (1) The manufacture/sales of the defendant's product were applicable to the indirect infringement of the present patent right, and all the allegations on violation of amendment requirements, violation of clarity requirement, violation of support requirements, and lack of novelty based on violation of division requirements in the defense of invalidation alleged by the appellants were expelled since they were not grounded;
 - (2) With regard to the invalidation reason of the lack of inventive step, in the case

where the defendants of an infringement lawsuit alleged defense of invalidity and a request was made for an invalidation trial with the invalidation reasons based on the same facts and evidences as in the defense of invalidity, it is judged that, if the decision of the JPO dismissing the request for an invalidation trial is finalized, maintenance of the allegation of the defense of invalidity in the infringement lawsuit contradicts the principle of good faith in the lawsuits and cannot be approved in view of the gist of Article 2 of the Code of Civil Procedure.

Moreover, with regard to the two members who did not make a request for an invalidation trial among the appellants, in view of the fact that the appellants had a continuous trade relationship on the defendant's product and interests related to the invalidation trial are in common among the three appellants, the aforementioned two members sufficiently recognized the contents and history of the invalidation trial and actually admitted the allegation/verification activities in the invalidation trial of the appellant who made the request for the invalidation trial, the two members who did not make a request for the invalidation trial among the appellants were in a position which can be treated equal to the appellant who made a request for the invalidation trial, and it was judged that the allegation of the defense of invalidity contradicts the principle of good faith in the lawsuits and is not approved in view of the gist of Article 2 of the Civil Code of Procedure.

Judgment rendered on June 27, 2019

2019 (Ne) 10009 Appeal case of seeking injunction against patent infringement

(Court of prior instance: Osaka District Court 2016 (Wa) 6494)

Date of conclusion of oral argument: May 16, 2019

Judgment

Appellant: Nissin Medical Industries Co., Ltd. (hereinafter referred to as "Appellant Nissin")

Appellant: Seiey Co., Ltd. (hereinafter referred to as "Appellant Seiey")

Appellant: OHU Co., Ltd. (hereinafter referred to as "Appellant OHU")

Appellee: YUYAMA Co., Ltd.

Main text

- 1. The appeals are all dismissed.
- 2. The appellants shall bear the cost of the appeal.

Facts and reasons

- No. 1 Gist of the appeal
- 1. All the parts the appellant lost in the judgment in prior instance shall be rescinded.
- 2. All the claims by the appellee shall be dismissed for the aforementioned parts.
- No. 2 Outline of the case (unless otherwise specified, abbreviations follow those in the judgment in prior instance).

This case is a case in which the appellee having the patent right (hereinafter referred to as the "present patent right") of the patent (Patent No. 4194737, hereinafter referred to as the "present patent") on the invention titled "roll paper for packaging medicine" alleged that the manufacture and sales of the product described in the attachment in the judgment in prior instance "List of the defendant's products" by the appellants (hereinafter referred to as the "defendant's product") were

applicable to indirect infringement of the present patent right (Article 101, item (i) of the Patent Act) and claimed joint payment of 9,996,781 yen as damages based on the tort of the patent right infringement and delay damages at the rate of 5% per annum prescribed in the Civil Code from the day following the date of service of the petition after the tort to completion of the payment.

The judgment in prior instance partially admitted the claim by the appellee for the payment within limits of 970,768 yen and the delay damages thereto against the appellant Nissin (jointly with the appellant OHU for 485,384 yen in that and the delay damages thereto and jointly with the appellant Seiey for 242,692 yen in that and the delay damages thereto), 485,384 yen and the delay damages thereto against the appellant OHU (jointly with the appellant Nissin for the full amount and jointly with the appellant Seiey for 242,692 yen in that and the delay damages thereto), and 242,692 yen and the delay damages thereto against the appellant Seiey (jointly with the appellant Nissin and the appellant OHU for the full amount), respectively.

The appellants appealed against the lost parts in the judgment in prior instance and instituted this appeal.

1. Basic facts

The correction was submitted as follows, and those described in No. 2, 1 in the "Facts and reasons" in the judgment in prior instance are cited.

- (1) The description on page 3, line 18 to page 5, line 14 in the judgment in prior instance is amended as follows:
- "(2) Patent right of appellee
- A. Filing history and the like of the present patent
- (A) The appellee divided the patent application (Application No. 2000-33185, application date: February 10, 2000) filed by further dividing a part of the patent application (Application No. 1998-340008, application date: November 30, 1998, Exhibit Ko 42-2) filed by dividing a part of the patent application (Application No. 1997-257175, priority date: September 20, 1996 and September 19, 1997, hereinafter referred to as the "present original application", Exhibit Ko 27, Exhibit Otsu 60) filed on September 22, 1997 and newly filed the present patent application (Application No. 2000-166273, hereinafter referred to as the "present application", Exhibit

Ko 2, Exhibit Otsu 31) on June 2 of the same year.

The appellee received a notice of reasons of refusal (Exhibit Otsu 24) as of July 26, 2007 and submitted a written amendment on the scope of claims as of October 1 of the same year (hereinafter referred to as the "present amendment", Exhibit Otsu 32).

After that, the appellee was granted registration of establishment of the patent (number of claims: 2, Exhibit Ko 1) of the present patent right on October 3, 2008.

- (B) The appellee made a request for correction trial on Claim 2 in the scope of claims of the present patent (Correction No. 2010-390095 case) on September 7, 2010, received the decision that the request was admitted on November 9 of the same year, and the decision was made final on the 18th of the same month (Exhibit Ko 3).
- (C) The appellee instituted the present lawsuit in the court of the prior instance on July 4, 2016.

The appellant Nissin made a request for a trial for invalidation of the present patent (Invalidation Trial No. 2017-800089 case, hereinafter referred to as the "other invalidation trial", Exhibit Otsu 46) on July 10, 2017.

The appellee made a request for correction (hereinafter referred to as the "present correction", Exhibits Ko 28, 29) seeking correction of Claims 1 and 2 in the scope of claims of the present patent as of October 6 of the same year.

The Japan Patent Office admitted the present correction and rendered the decision "the request for the trial is dismissed." (hereinafter referred to as the "another JPO decision", Exhibit Otsu 57) on June 26, 2018. After that, the JPO decision on the other invalidation trial was finalized, and the final registration was gone through (Exhibit Ko 38) on August 28th of the same year.

After that, the court of prior instance concluded the oral argument on 24th of the same month and rendered the judgment in prior instance in which the claim by the appellee was partially admitted on December 18 of the same year.

B. Description of the scope of claims originally attached to the application of the present application

The description of Claim 1 in the scope of claims originally attached to the application of the present application is as follows (Exhibit Otsu 31):

[Claim 1]

A roll paper for packaging medicine used in a medicine packaging device including: a paper feeding portion in which a hollow shaft is provided rotatably around a support shaft supported non-rotatably, a motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by a feeding roller; and a packaging portion in which the sheet is two-folded while a medicine is input from a hopper between them, and a heating roller for heat-sealing the sheet into which the medicine was input in a width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein an angular sensor for detecting a rotation angle of the roll paper is provided on the support shaft; a length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; and means for bonding the roll paper to the hollow shaft, capable of bonding and rotating, is provided on an end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while a sheet tension is adjusted in accordance with a roll paper diameter on the basis of signals of both the sensors, comprising: a hollow core tube and the roll paper in which a sheet for packaging medicine is wound on it in a roll state; a magnet is disposed at a position where a wound amount of the sheet can be detected by the angular sensor provided on the support shaft in order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft; and the magnet is disposed so as to be rotated with the roll paper.

C. Description of the scope of claims after the present amendment

The description of Claim 1 in the scope of claims after the present amendment is as follows (the underlined parts are amended parts by the present amendment, Exhibit Otsu 32):

[Claim 1]

A roll paper for packaging medicine used in a medicine packaging device including: a paper feeding portion in which a hollow shaft is provided rotatably around a support shaft supported non-rotatably, a motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably

attached to the hollow shaft is fed out by a feeding roller; and a packaging portion in which a medicine is input from a hopper between the two-fold sheet, and a heating roller for heat-sealing the sheet into which the medicine was input in a width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein an angular sensor for detecting a rotation angle of the roll paper is provided on the support shaft; a shift detection sensor for detecting a shift of the hollow shaft between the hollow shaft and a fixed support plate of the support shaft is provided; a length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; means for bonding the roll paper to the hollow shaft, capable of bonding and rotating, is provided on an end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while a sheet tension is adjusted in accordance with a roll paper diameter on the basis of signals of the angular sensor and the length-measuring sensor; and moreover, the shift between the roll paper detachably attached to the hollow shaft and the hollow shaft is detected by failure of matching between the signal of the angular sensor and the signal of the shift detection sensor, comprising: a hollow core tube and the roll paper in which a sheet for packaging medicine is wound on it in a roll state; a magnet is disposed at a position where a wound amount of the sheet <u>calculated from a detection signal of a rotation</u> angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor can be detected in order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft; and the magnet is disposed so as to be rotated with the roll paper.

D. Description of the scope of claims after the present correction

The description of Claim 1 in the scope of claims after the present correction is as follows (the underlined parts are corrected parts by the present correction; hereinafter, the invention according to Claim 1 after the present correction is referred to as the "present corrected invention" Exhibit Otsu 57):

[Claim 1]

A roll paper for packaging medicine used in a medicine packaging device including: a paper feeding portion in which a hollow shaft is provided rotatably around a support shaft supported non-rotatably, a motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by a feeding roller; and a packaging portion in which a medicine is input from a hopper between the two-fold sheet, and a heating roller for heat-sealing the sheet into which the medicine was input in a width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein an angular sensor for detecting a rotation angle of the roll paper is provided on one end of the support shaft; a shift detection sensor for detecting a shift of the hollow shaft between the hollow shaft and a fixed support plate of the support shaft is provided; a length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; means for detachably fixing the roll paper on the hollow shaft and integrally rotating both at fixing thereof is provided on an end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while a sheet tension is adjusted in accordance with a roll paper diameter on the basis of signals of the angular sensor and the length-measuring sensor; and moreover, the shift between the roll paper detachably attached to the hollow shaft and the hollow shaft is detected by failure of matching between the signal of the angular sensor and the signal of the shift detection sensor, comprising: a hollow core tube and the roll paper in which a sheet for packaging medicine is wound on it in a roll state; a plurality of magnets are disposed at a position where a wound amount of the sheet can be calculated from a detection signal of a rotation angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor and can be detected by the angular sensor in order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft; and the magnets are disposed so as to be rotated with the roll paper.

(3) Separate description of constituent features of the present corrected invention

The constituent features of the present corrected invention are separately described as follows:

E. A roll paper for packaging medicine

A. used in a medicine packaging device including: a paper feeding portion in which a hollow shaft is provided rotatably around a support shaft

supported non-rotatably, a motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by a feeding roller; and a packaging portion in which a medicine is input from a hopper between the two-fold sheet, and a heating roller for heat-sealing the sheet into which the medicine was input in a width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein an angular sensor for detecting a rotation angle of the roll paper is provided on one end of the support shaft; a shift detection sensor for detecting a shift of the hollow shaft between the hollow shaft and a fixed support plate of the support shaft is provided; a length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; means for detachably fixing the roll paper on the hollow shaft and integrally rotating both at fixing thereof is provided on an end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while a sheet tension is adjusted in accordance with a roll paper diameter on the basis of signals the angular sensor and the length-measuring sensor; and moreover, the shift between the roll paper detachably attached to the hollow shaft and the hollow shaft is detected by failure of matching between the signal of the angular sensor and the signal of the shift detection sensor,

- B. comprising: a hollow core tube and the roll paper in which a sheet for packaging medicine is wound on it in a roll state;
- C. a plurality of magnets are disposed at a position where a wound amount of the sheet can be calculated from a detection signal of a rotation angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor and can be detected by the angular sensor in order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft; and
 - D. the magnets are disposed so as to be rotated with the roll paper."
- (2) The phrase on page 5, line 23 in the judgment in prior instance, "was supplied." is corrected to "was supplied, whereby the appellant Seiey sold the defendant's product to the appellant OHU and the appellant OHU to the appellant Nissin."
- 2. Issues
- (1) Belonging of the integrated product to the technical scope of the present

corrected invention

- A. Whether or not the integrated product satisfies "used" in constituent feature A (issue (1)a).
- B. Whether or not the integrated product satisfies the "two-fold sheet" in constituent feature A (issue (1)b).
- C. Whether or not the appellant Nissin's issue over satisfaction of constituent feature A contradicts the principle of faith (issue (1)c).
- (2) Establishment of indirect infringement under Article 101, item (i) of the Patent Act (issue (2))
- (3) Establishment of joint tort by the appellants and customers and the like (issue (3))
- (4) Establishment of the defense of invalidity
- A. Presence or absence of invalidation reason by violation of amendment requirements (issue (4)a)
- B. Presence or absence of invalidation reason by violation of clarity requirements (issue (4)b)
- C. Presence or absence of invalidation reason by violation of support requirements (issue (4)c)
- D. Presence or absence of invalidation reason by lack of novelty of the present corrected invention with Exhibit Otsu 60 as the primary cited reference (issue (4)d)
- E. Presence or absence of invalidation reason by lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference (issue (4)e)
- F. Presence or absence of invalidation reason by lack of inventive step of the present corrected invention with Exhibit Otsu 23 as the primary cited reference (issue (4)f)
- (5) The amount of damages of the appellee (issue (5))

(omitted)

No. 4 Judgment of this court

This court also judges that the claim by the appellee for the payment within limits of 970,768 yen against the appellant Nissin, for 485,384 yen against the appellant OHU, and 242,692 yen against the appellant Seiey and the delay damages thereto is grounded. The reason is as follows:

1. Described matters of the present description

(1) The detailed description of the invention in the present description (Exhibits Ko 2, 3) has the following description (see the attachment 1 for "Fig. 1" to "Fig. 8" cited in the following description).

A. [0001]

[Technical Field of the Invention]

The present invention relates to a roll paper for packaging medicine used in a medicine packaging device in which a sheet is sent from a paper feeding portion while a tension of the sheet pulled out of the roll paper is adjusted and the medicine is packaged in the packaging portion.

[0002]

[Prior Art]

As a medicine packaging device, such a device is known that a sealing device is provided in a transfer path for pulling out and transferring a sheet from a sheet supply portion rotatably supporting a sheet of a thermally fusible packaging paper wound in a roll state, the sheet is two-folded on an upstream side of this sealing device, and the medicine is packaged by heating/fusing the sheet in the width direction and on both side edge parts by the sealing device in a band shape after the medicine is supplied between them.

[0003]

When the sheet is used up and lost, it is replaced with a new roll, and a sheet is pulled out of the new roll and set in the packaging device. It is preferable that the sheet pulled out of this sheet roll is not accurately two-folded when the two-folded rear peripheral edge or the like is fused but is pulled out with a constant tension at all times so that it is not fused in a slightly shifted state, but since in actuality, the roll diameter is changed in accordance with a pulled-out amount of the sheet, the pulling-out tension is changed little by little.

[0004]

Thus, Utility Model Publication No. 1989-36832 proposes a sheet tension adjusting device for adjustment so that the tension is made substantially constant even if the change in the diameter of the sheet roll is changed. In the sheet tension adjusting device according to this publication, a sheet roll is detachably fitted/attached to a roll supporting cylinder, a plurality of winding-diameter detection sensors are disposed on

a side of the sheet roll in a radial direction, and the tension is adjusted so as to be constant by adjusting an electromagnetic force of an electromagnetic brake provided inside the roll supporting cylinder by a signal of this detection sensor so that the braking force is weakened in steps as the roll diameter becomes smaller.

B. [0005]

[Problems to be Solved by the Invention]

However, in the aforementioned conventional sheet tension adjusting device, since a method of detecting the change in the wound amount by use of the sheet in steps by the winding-diameter detection sensor disposed in the radial direction is employed, when the diameter reaches the one at which a rank of the detection sensor is switched, a vibration phenomenon occurs in which a braking force rank of the electromagnetic brake is fluctuated up and down in each rotation due to eccentricity of a core tube axis, a weight of the sheet, winding distortion, and the like. Thus, a so-called lug shift in which edge parts of the sheet are not accurately overlapped when the sheet is two-folded in the packaging portion occurs due to the tension fluctuation, and a defective packaging part might be generated.

[0006]

Moreover, since the rank of the braking force is rapidly changed, a tear can occur in the width direction in some cases. The causes of malfunction of the detection sensor also include use of a light-reflection type other than the above. Materials of the sheet used in the medicine packaging device include various ones such as glassine paper (translucent), laminated paper (transparent), and the like, but if end surface positions of these sheets are slightly changed in each layer, return of a reflected reflection light becomes different and is not detected as a signal and thus, detection accuracy might be deteriorated, or particularly in the case of the laminated paper, since an influence caused by a humidity change is large, meandering winding can occur easily, and irregularity on the end surface might cause deterioration in the detection accuracy.

[0007]

Furthermore, a thermal printer for printing on the packaging paper is provided generally on an upstream side from a position where the sheet is two-folded by the packaging portion, but a loss in print dots or a lamp in a remaining-amount display mechanism of the printing device might cause deterioration in durability due to the vibration phenomenon in this thermal printer.

[8000]

On the other hand, the roll paper used in the medicine packaging device is formed by winding an extremely thin sheet of approximately 30 μm of the aforementioned glassine paper or laminated paper around an outer periphery of a hollow core tube in a roll state, and its length is considerable, such as 300 to 500 m in general. Methods for detecting the change in the winding diameter of such roll paper other than the method by the aforementioned winding-diameter detection sensor include a method of mounting a sensor for detecting a rotation number of the support shaft on a rotating support shaft to which the roll paper is attached, and a method of providing a projecting portion on an end of the hollow core tube of the roll paper and reading a mark provided on the projecting portion by a photosensor or the like.

[0009]

However, with the sensor on the rotating support shaft, a rotational shift can occur between the rotating support shaft and the hollow core tube depending on a degree of a tension when the sheet of roll paper is fed out, and the rotation of the roll paper itself needs to be directly detected in order to accurately detect the rotation of the roll paper, and the method using the sensor on the rotating support shaft is not necessarily appropriate.

[0010]

Moreover, with regard to the method of providing the projecting portion on the end of the hollow core tube, since the lengthy roll paper as above has a considerable weight as a whole, an operation of attachment to the rotating support shaft becomes heavy, and there is a concern that the projecting portion hits and damages devices in the periphery during the operation and thus, the method of providing the projecting portion is not preferable.

[0011]

The present invention pays attention to the problems as above in the conventional medicine packaging device and has an object to provide a roll paper for packaging medicine used in a medicine packaging device in which a braking force is accurately set for each step so that a level of the braking force to be controlled and selected in steps is not fluctuated by an influence

by the slight fluctuation in the roll paper diameter caused by a winding state of the roll paper made by winding an extremely thin sheet, and a proper tension according to the diameter of the roll paper is stably given to the paper feeding portion, and the medicine can be packaged by a packaging sheet without generating the lug shift or a tear in the sheet and which can give rotational angle data to the angular sensor in the paper feeding portion of the packaging device.

C. [0012]

[Means for Solving the Problem]

The present invention is a roll paper for packaging medicine, as means for solving the aforementioned problem,

used in a medicine packaging device including:

a paper feeding portion in which a hollow shaft is provided rotatably around a support shaft supported non-rotatably, a motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by a feeding roller; and

a packaging portion in which the sheet is two-folded while a medicine is input from a hopper between them, and a heating roller for heat-sealing the sheet into which the medicine was input in a width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein

an angular sensor for detecting a rotation angle of the roll paper is provided on the support shaft;

a length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; and

means for detachably fixing the roll paper on the hollow shaft and integrally rotating both at the fixing thereof is provided on an end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while a sheet tension is adjusted in accordance with a roll paper diameter on the basis of signals of both the sensors, comprising:

a hollow core tube and the roll paper in which a sheet for packaging medicine is wound on it in a roll state;

a magnet is disposed at a position where a wound amount of the sheet can be calculated by a detection signal of the rotation angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor, and detection by the angular sensor is possible in

order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft.

[0013]

In the aforementioned medicine packaging device, the packaging work is performed while the sheet tension of the sheet supplied from the paper feeding portion is adjusted so that the lug shift or a tear does not occur in the packaging action in the packaging portion. At that time, signal detection by the two sensors, that is, the length-measuring sensor and the angular sensor is based. When the detection signals from the aforementioned two sensors are obtained, with a predetermined amount of one of the sensors as a reference, a change in the wound amount is directly obtained by the change in the other sensor.

[0014]

By making a predetermined range of the change in the wound amount correspond to the change in the wound amount diameter of the roll paper in advance, the level of control in steps of the braking force can be selected only by detecting the change in the wound amount, and thus, the braking force can be controlled in accordance with the diameter of the wound amount, and the sheet tension can be adjusted to an optimal tension for each step.

[0015]

In this case, even if the braking force is changed in steps, each rank of the braking force is configured to be switched sequentially from a larger one to a smaller one so that the braking force is changed within a range not generating a lug shift or a tear by the change in the tension caused by the switching and thus, nonconformity in the method of directly detecting the winding diameter of the roll paper by the sensor as before that each rank of the braking force is rapidly fluctuated up and down in the vicinity of the rank switching diameter of the braking force due to uneven winding of the winding diameter does not occur because of the difference in the control method.

[0016]

The roll paper for packaging medicine of the present invention is used in the medicine packaging device. In use, it is attached to the hollow shaft of the support shaft in the paper feeding portion detachably and capable of bonding/rotation, and the wound amount data of the sheet for controlling braking means engaged with the hollow shaft is generated by the magnet disposed, capable of detection, to the angular sensor.

D. [0017]

[Description of Embodiment]

An embodiment of the present invention will be described below by referring to the attached drawings. Fig. 1 is a schematic configuration diagram in which a paper feeding portion and a packaging portion of the medicine packaging device are taken out. The paper feeding portion is formed such that roll paper R in which a sheet for packaging the medicine is wound around a core tube P in a roll state is rotatably attached to a support shaft 1 supported horizontally, and a packaging sheet S pulled out of the roll paper R is supplied to the subsequent packaging portion via feeding rollers 2 and 3.

[0018]

The packaging portion is provided such that, after a predetermined amount of the medicine is input from a hopper 5 when it is two-folded by a triangular plate 4, a width direction and both side edge parts are heat-sealed by a heating roller 6 having a perforation cutter at a predetermined interval into a band shape. The packaging portion has many constituent members other than these, but only required members are shown in order to avoid complexity.

[0019]

Fig. 2 is a main vertical sectional view of a state where the roll paper R and the core tube P are attached to the paper feeding portion. As illustrated, the support shaft 1 is constituted by a center shaft 1a having one end thereof mounted/fixed by a nut to a supporting plate 11, an outer shaft 1b integrally fitted thereto, and a hollow shaft 1c rotatably mounted through bearings 12, 12 provided at positions closer to the right and left ends of the outer shaft 1b, respectively.

[0020]

Reference numeral 13 denotes a shaft head on one end of the center shaft 1a, and reference numeral 14 denotes a flange portion on one end of the outer shaft 1b. A flange portion 15 is provided also on an opposite side end of the hollow shaft 1c. When the core tube P and the roll paper R wound around it are attached to the support shaft 1, the roll paper R is rotatably supported by the support shaft 1 through the hollow shaft 1c, and

the attached core tube P and the roll paper R are detachably fixed to the hollow shaft 1c by an attracting force of a plurality of magnets 16 disposed at an appropriate interval on an inner diameter surface of the flange portion 15 and ferromagnetic bodies (iron part) 17 disposed correspondingly to them along a circumference of the end surface of the core tube P in advance. At the fixation, the core tube P and the roll paper R are integrally rotated with the hollow shaft 1c.

[0021]

A motor brake 20 is engaged with the hollow shaft 1c and gives an appropriate tension to the packaging sheet S fed out of the roll paper R. The motor brake 20 is mounted on the supporting plate 11 and rotates a gear unit 21 through a transmission belt, not shown, and a pinion 22 provided on an output shaft thereof is engaged with a large gear 23 provided on an outer end surface of the flange portion 15 and gives the braking force to the hollow shaft 1c.

[0022]

The motor brake 20 is a small AC motor (AC) and is used so as to give the braking force by applying a direct-current voltage as a supply power source. In this case, as will be described later, the braking force is changed in accordance with a magnitude of the tension of the packaging sheet S fed out by changing a value of the direct-current voltage in four steps.

[0023]

With regard to the magnet 24, a Hall element sensor 25, a proximity switch 26, and a projection 27, as further illustrated in Figs. 2 and 5, a signal from a rotation angle sensor made of the magnet 24 and the Hall element sensor 25 provided on the core tube P and a signal from a shift detection sensor of the packaging sheet made of the proximity switch 26 and the projection 27 are input into a control circuit 30 as illustrated in Fig. 3 (the control circuit 30 will be described later).

[0024]

That is, a fed-out amount of the packaging sheet S of the roll paper R is accurately calculated from the signal of the length-measuring sensor and the signal of the rotation angle sensor in the first embodiment so that the braking force corresponding to the change in the winding diameter of the roll paper R is adjusted, and tension adjustment is performed properly.

[0025]

As illustrated in Fig. 6, with regard to the magnets 24 and the Hall element sensors 25 provided along the inner periphery of the core tube P and on the one end of the support shaft 1 in this embodiment, respectively, four pieces of the magnets 24 are disposed at each of four points whose positions are different by 67.5° from one base point, and four pieces of the Hall element sensors 25 are disposed at four positions on a center line passing through the base point and on the center line orthogonal thereto.

[0026]

The disposition is selected as the most rational combination of number and disposition of the magnets 24 and the Hall element sensors 25, and there can be various variations as illustrated in Figs. 7(a) to 7(d), for example. However, it is needless to describe that any disposition may be used as long as the Hall element sensor 25 generates one pulse signal at every rotation of the core tube P by 22.5° as an angle signal indicating the rotation of the core tube P.

[0027]

As a detector for detecting the rotation of the core tube P, the combination of the magnets 24 and the Hall elements 25 is used in the aforementioned example, but a photosensor can be used instead of them. The photosensor is made of a light emitting element and a light receiving element, and they are fixed/mounted to one end of the support shaft 1 (outer shaft 1b) similarly to the Hall elements 25.

[0028]

However, a mounting position is provided such that, a part of a flange end of the outer shaft 1b is extended closer to an outer end than the Hall element sensor 25 in Fig. 2 or an equivalent mounting seat is formed, and a projecting portion is provided also on the side end of the core tube P corresponding thereto so that the projecting portion is sandwiched by the light emitting element and the light receiving element of the photosensor at a predetermined angle pitch of 22.5°. The numbers of the photosensors and the projecting portions are similar to the case of the Hall element sensors 25.

E. [0029]

Fig. 3 is a schematic block diagram of the circuit controlling major members of the device for sending the packaging sheet from the paper feeding portion to the packaging portion and packaging the medicine. The control circuit 30 is configured to output a control instruction to give the braking force to the motor brake 20 by any one of a signal from an end sensor 31, a signal from a rotary encoder 32 provided on a feeding roller 3, and a signal from a rotation number counter 33 for measuring the rotation number of a motor 6a on the output shaft thereof connected to a shaft of the heating roller 6 and a control instruction to the motor 6a. Reference numeral 34 denotes an input portion for receiving an input of data from outside.

[0030]

Fig. 5 is a side view when seen from an arrow view V-V in Fig. 2 and illustrates mainly the disposition of the shift detection sensor of the packaging sheet. In this example, one piece of the proximity switch 26 is provided in the supporting plate 11, and 16 pieces of the projections 27 are formed on the flange portion 15 on the rotating hollow shaft 1c end of the support shaft 1.

[0031]

This shift detection sensor is for detecting presence or absence of a feeding-out shift of the packaging sheet when a signal at the same pitch as that of a reference signal is not detected, by setting a signal of the rotation angle sensor by the Hall element sensor 25 described above as the reference.

[0032]

In the medicine packaging device of the embodiment with the configuration above, the packaging work of the medicine is performed while the sheet tension is adjusted, as follows. In this embodiment, the roll paper R set on the paper feeding portion is assumed to have a maximum diameter of dmax and a minimum diameter of d0, and as illustrated in Fig. 8, the braking force of the motor brake 20 is controlled in four steps by a feeding-out amount 1 of the packaging sheet obtained on the basis of the length-measuring signal by the rotary encoder 32 and an angle θ based on the pulse signal of the Hall element sensor 25 which is an angular sensor, and the tension adjustment is made with an optimal braking force in accordance with the change in the diameter of the roll paper R.

[0033]

The roll paper R with maximum diameter dmax = 160 mm, minimum

diameter $d0 \approx 6.4$ mm, and sheet thickness $\gamma = 30$ µm in the illustrated example is used. Therefore, assuming that the range in which the diameter is changed by use of the packaging sheet S is simply divided into four steps, the motor brake only needs to be changed each time the diameter is reduced by (160 - 64)/4 = 24 mm.

F. [0068]

[Advantageous Effect of the Invention]

As described above in detail, the roll paper for packaging medicine of the present invention used in the medicine packaging device is a roll paper with simple configuration made of the hollow core tube and the roll paper wound around it and capable of adjusting the sheet tension by detecting the magnets disposed at the positions where the sheet wound amount can be detected by the angular sensor of the support shaft, and by using this for the medicine packaging device, such merits that a packaging action without a lug shift or a tear in the packaging action can be realized.

(2) According to the matters described in the aforementioned (1), it is found that the description has the following disclosure related to the present corrected invention.

A. In the medicine packaging device for packaging the medicine by heating/fusing the sheet by the sealing device in the width direction and both side edge parts in the band shape in the packaging portion after the sheet of the roll paper in which the sheet of the heat fusible packaging paper is wound in the roll state is pulled out of the sheet supply portion (paper feeding portion), by two-folding the sheet, and by supplying the medicine between them, it is preferable that the sheet is pulled out with the constant tension at all times so that the sheet is not two-folded accurately nor fused in a slightly shifted state when the peripheral edges and the like are fused, but in actuality, the roll diameter is changed in accordance with the pulled-out amount of the sheet, and the pulling-out tension is slightly fluctuated, which is a problem ([0001] to [0003]).

Thus, such a sheet tension adjusting device for adjusting the tension so that it becomes substantially constant even if a change occurs in the roll diameter by detecting the change in the wound amount by use of the sheet in steps by the winding-diameter detection sensor disposed in the radial direction and by weakening the braking force in steps as the roll diameter becomes smaller by adjusting the electromagnetic force of the

electromagnetic brake by the signal of this winding-diameter detection sensor has been proposed ([0004]).

However, in the conventional sheet tension adjusting device, since the method of detecting the change in the wound amount by use of the sheet by the winding-diameter detection sensor in steps is employed, when the diameter reaches the one at which the rank of the detection sensor is switched, the vibration phenomenon occurs in which the braking force rank of the electromagnetic brake is fluctuated up and down in each rotation due to eccentricity of the core tube axis, the weight of the sheet, winding distortion, and the like, and the so-called lug shift in which the edge parts of the sheet are not accurately overlapped when the sheet is two-folded in the packaging portion occurs due to the tension fluctuation, and a defective packaging part was generated or since the braking force rank is rapidly fluctuated, a tear was generated in the width direction in some cases ([0005], [0006]).

B. "The present invention" pays attention to the problems in the conventional medicine packaging device and has an object to provide a roll paper for packaging medicine used in the medicine packaging device in which the braking force is accurately set for each step so that the level of the braking force to be controlled and selected in steps is not fluctuated by an influence by the slight fluctuation in the roll paper diameter caused by the winding state of the roll paper made by winding an extremely thin sheet, and a proper tension according to the diameter of the roll paper is stably given to the paper feeding portion, and the medicine can be packaged by a packaging sheet without generating the lug shift or a tear in the sheet and which can give rotational angle data to the angular sensor in the paper feeding portion of the packaging device, and

as means for solving the above problem,

the configuration of the roll paper for packaging medicine used in a medicine packaging device including:

the paper feeding portion in which the hollow shaft is provided rotatably around the support shaft supported non-rotatably, the motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by the feeding roller; and

the packaging portion in which the sheet is two-folded while the medicine is input from the hopper between them and which has the heating roller for heat-sealing the sheet into which the medicine was input in the width direction and both side edge parts at a predetermined interval into a band shape is provided, wherein

the angular sensor for detecting a rotation angle of the roll paper is provided on the support shaft;

the length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; and

the means for detachably fixing the roll paper on the hollow shaft and integrally rotating both at fixing thereof is provided on the end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while the sheet tension is adjusted in accordance with the roll paper diameter on the basis of the signals of both the sensors, comprising:

the hollow core tube and the roll paper in which the sheet for packaging medicine is wound on it in the roll state;

the magnet is disposed at the position where the wound amount of the sheet can be calculated by the detection signal of the rotation angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor, and detection by the angular sensor is possible in order to give the sheet tension according to the wound amount of the sheet of the roll paper to the hollow shaft was employed ([0011], [0012]).

The roll paper for packaging medicine of "the present invention" is roll paper with simple configuration made of the hollow core tube and the roll paper wound around it and capable of adjusting the sheet tension by detecting the magnets disposed at the positions where the sheet wound amount can be detected by the angular sensor of the support shaft, and by using this for the medicine packaging device, such effects are exerted that a packaging action without a lug shift or a tear can be realized ([0068]).

- 2. Issue (1) (Belonging of the integrated product to the technical scope of the present corrected invention)
- (1) Issue (1)a (Whether or not the integrated product satisfies "used" in constituent feature A)

The correction was submitted as follows and those described in Fourth, 2(1) in the "Facts and reasons" in the judgment in prior instance are cited.

A. The description on page 35, lines 4 to 23 in the judgment in prior

instance is revised as follows:

"A. Meaning of 'used' in constituent feature A

According to the description in the scope of claims of the present corrected invention (Claim 1), the present corrected invention is the invention of an object of the 'roll paper for packaging medicine' (constituent feature E) made of the configurations of constituent features A to D, and constituent feature A describes the matters related to the medicine packaging device, constituent features B and D describe the matters related to the 'hollow core tube', the 'roll paper', and the 'plurality of magnets' of the 'roll paper for packaging medicine' (hereinafter they are collectively referred to as the 'present roll paper and the like'), and constituent feature C describes the matters related to both, respectively, and in constituent feature A, the roll paper for packaging medicine is described as that 'used' in the medicine packaging device.

With regard to the term of the 'used' in constituent feature A that 'used in the medicine packaging device including: the paper feeding portion in which the hollow shaft is provided rotatably around the support shaft supported non-rotatably, the motor brake is engaged with the hollow shaft, and a sheet of roll paper detachably attached to the hollow shaft is fed out by the feeding roller; and the packaging portion in which the sheet is two-folded while the medicine is input from the hopper between them and which has the heating roller for heat-sealing the sheet into which the medicine was input in the width direction and both side edge parts at a predetermined interval into a band shape, wherein the angular sensor for detecting a rotation angle of the roll paper is provided on an end of the support shaft; the shift detection sensor for detecting a shift of the hollow shaft between the hollow shaft and the fixed supporting plate of the support shaft is provided; the length-measuring sensor for measuring a sheet feeding length on a sheet feeding path to the packaging portion is provided; the means for detachably fixing the roll paper on the hollow shaft and integrally rotating both at fixing thereof is provided on the end where the roll paper and the hollow shaft are in contact with each other so that the medicine is packaged while the sheet tension is adjusted in accordance with the roll paper diameter on the basis of the signals of the angular sensor and the length-measuring sensor: and moreover, the shift between the roll paper detachably attached to the hollow shaft and the hollow shaft is detected by

failure of matching between the signal of the angular sensor and the signal of the shift detection sensor,' in view that the auxiliary verb of 'used' indicates a passive voice as well as capability and the description in the scope of claims of the invention of the object should be interpreted to specify a structure, characteristics, and the like of the object, it is natural to interpret to mean 'capable of being used'.

Subsequently, the description does not have description defining the term of 'used' in 'used in the medicine packaging device,' in constituent feature A or description conflicting with the aforementioned interpretation.

Then, it is considerable to interpret that 'used' in constituent feature A means 'capable of being used.'"

B. The "B. Meaning of 'used' in constituent feature A" on page 35, line 24 in judgment in the prior instance is revised to "B. Satisfaction of the integrated product", and the "supporting shaft" on the last line of the same page is corrected to "one end of the support shaft".

C. The expression "such a position" on page 36, line 1 in judgment in the prior instance is revised to "the 'position capable of detection' by the 'angular sensor' provided on the one end of the supporting shaft (constituent feature C)", and the "means for detachably fixing the hollow shaft is provided on the end of the hollow core tube in contact with the hollow shaft of the medicine packaging device" is added subsequent to the "present roll paper and the like," on the same page, line 4.

D. The description on page 36, lines 7 to 12 in judgment in prior instance is revised as follows:

"Then, the technical scope of the present corrected invention is defined by the matters described in constituent features B to D and the aforementioned specifying matters on the roll paper and the like of constituent feature A and thus, if the integrated product includes the configurations of constituent features A to E, it belongs to the aforementioned technical scope, and whether the integrated product is actually used in the medicine packaging device specified by constituent feature A does not influence decision on whether or not the integrated product belongs to the technical scope."

E. The phrase that "'used' in constituent feature A is considered not to specify the configuration or structure of the roll paper for packaging medicine but to have a methodological element (step) as a feature" is added subsequent to "even if it is not admitted" on page 36, lines 16 to 17 in judgment in prior instance.

F. The description on page 36, line 25 to page 37, line 3 in the judgment in prior instance is revised as follows:

"... Moreover, by considering the filing history that with respect to the receipt of the notice of reasons of refusal as of July 26, 2007 (Exhibit Otsu 24) on lack of inventive step with 'Cited Document 4' (Unexamined Patent Application Publication No. 1996-198206) as the cited example for the invention according to Claim 1 at filing of the present application, the appellee did not allege any difference in configuration between the roll paper for packaging medicine described in 'Cited Document 4' and the roll paper for packaging medicine of the invention according to Claim 1, or rather made the present amendment for amending configuration of the medicine packaging device in Claim 1 and emphasized the difference in configuration between the medicine packaging device described in 'Cited Document 4' and the medicine packaging device described in the amended Claim 1 in the written opinion as of October 1 of the same year (Exhibit Otsu 25) and was granted the patent decision, the appellants allege that it should be considered that the appellee intentionally excluded the roll paper for packaging medicine which only had the 'configuration capable of being used' in the medicine packaging device simply satisfying constituent feature A from the scope of the corrected invention.

However, the appellee pointed out in the written opinion that the device described in 'Cited Document 4' has a method of adjusting the sheet tension basically different and detection of a shift between the roll paper and the hollow shaft is not described at all, and since it is described 'the invention of the present application is the invention of roll paper assumed to be used in the medicine packaging device having the configuration of the "magnet disposed at a position capable of detecting the wound amount of the roll paper by detecting the detection signals of the rotation angle and the length-measuring sensor" and "the shift between the roll paper detachably

attached to the hollow shaft and the hollow shaft is detected by failure of matching between the signal of the angular sensor and the signal of the shift detection sensor" (page 6, lines 2 to 6 in Exhibit Otsu 25) in the filing history of the present patent, it cannot be interpreted that the appellee intentionally excluded the roll paper for packaging medicine with the configuration capable of being used in the medicine packaging device specified by constituent feature A from the technical scope of the present corrected invention.

Therefore, the allegation by the appellants is not grounded."

G. The "present invalidation trial" on page 37, line 4 in the judgment in prior instance is revised to the "other invalidation trial", the "invention after the correction" on the same page, the same line to the "present corrected invention", and the "present invention" on the same page, line 6 to the "present corrected invention", and the following is added as a new paragraph at the end of the same page, line 9.

"C. Moreover, the appellants allege that, by considering the wording of 'used' in constituent feature A, 'Difference [iv]' between the present corrected invention and the prior art (the present corrected invention calculates the 'wound amount of the sheet' and 'gives the sheet tension according to the wound amount of the sheet to the hollow shaft' by having the configuration of the differences [i] to [iii]) and the filing history of the present patent, in order for the integrated product to satisfy 'used' in constituent feature A, it is not enough that the roll paper for packaging medicine has the configuration capable of being used in the medicine packaging device which simply satisfies constituent features A and C, but allegation verification is needed that the roll paper for packaging medicine is actually 'used' in the medicine packaging device which satisfies constituent feature A (the medicine packaging device including a part of the configuration of at least 'Difference [i]' (the 'angular sensor' detects the 'rotation angle of the roll paper' and is provided on the one end of the support shaft) and 'Difference [ii]' (the 'magnet' is disposed at 'a position, capable of calculating the wound amount of the sheet from the detection signal of the rotation angle by the angular sensor provided on the support shaft and the detection signal of the length-measuring sensor in order to give the sheet tension according to the wound amount of the sheet of the roll

paper to the hollow shaft and capable of detection by the angular sensor').

However, as described above, 'used' in constituent feature A of the present corrected invention means 'capable of being used', and whether or not the integrated product is actually used in the medicine packaging device specified by constituent feature A does not influence the decision on whether or not the integrated product belongs to the technical scope of the present corrected invention and thus, the aforementioned allegation by the appellants cannot be employed."

- H. "C" on page 37, line 10 in the judgment in prior instance is revised to "D".
- (2) Issue (1)b (Whether or not the integrated product satisfies the "two-fold sheet" in constituent feature A.)

The correction was submitted as follows and those described in No. 4, 2(2) in the "Facts and reasons" in the judgment in prior instance are cited.

- A. The "present invention" on page 38, line 2 in the judgment in prior instance is revised to the "present corrected invention".
- B. The phrase "before the triangular plate 4" on page 38, line 7 in judgment in prior instance is revised to "before the 'two-fold sheet' in constituent feature A reaches the triangular plate 4".

(3) Entire issue (1)

The correction was submitted as follows and those described in No. 4, 2(3) in the "Facts and reasons" in the judgment in prior instance are cited.

- A. Each instance of "present invention" on page 39, lines 5 and 10 in the judgment in prior instance is revised to the "present corrected invention".
- B. Each instance of "present lawsuit" on page 39, lines 12 and 14 in the judgment in prior instance is revised to the "present lawsuit".
- 3. Issue (2) (Establishment of indirect infringement under Article 101, item(i) of the Patent Act)

The correction was submitted as follows and those described in No. 4, 3 in the "Facts and reasons" in the judgment in prior instance are cited.

(1) The description on page 39, line 17 to page 40, line 5 in the judgment in prior instance is revised as follows:

- "(1) Whether the defendant's product is found to be an 'object used only for production' of the integrated product (Article 101, item (i) of the Patent Act)"
- (2) The following description is added as a new paragraph to the end of page 41, line 9 of the judgment in prior instance.

"The appellants allege that the defendant's product is an exclusive product to be used for the medicine packaging device made by the appellant Nissin, and economical, commercial, or practical applications consistent with socially-accepted ideas such as use for the medicine packaging device by Elk and the packaging device by Ueda are also admitted.

However, the allegation by the appellants is not grounded, as follows."

- (3) The "packaging paper" on page 41, line 12 in the judgment in prior instance is revised to the "present product" and "your company" on line 13 to "customer".
- (4) The description on page 43, line 11 in the judgment in prior instance that "(3) ... Decision on patent right infringement" is revised to "(2) ... decision on indirect infringement" and the following description is added as a new paragraph to the end of the same page, line 19:

"With regard to that, the appellants allege that [i] Although the present corrected invention is not an application invention itself, it exerts a marked effect that the 'sheet tension according to the wound amount of the sheet is given to the hollow shaft' only when the roll paper for packaging medicine is 'used' in the medicine packaging device which satisfies constituent feature A; it includes the feature similar to that of the application invention, and working of the present corrected invention can be considered to be similar to the working act of the application invention and thus, it is reasonable to interpret that the present corrected invention is limited to the act of production, use, assignment, and the like of the roll paper for packaging medicine specified by constituent feature B and after 'in order to be used for the medicine packaging device which satisfies constituent feature A'; [ii] Since the medicine packaging device by the appellee does not satisfy constituent feature A, the user does not manufacture (produce) or use the integrated product to be used for the medicine packaging device which satisfies constituent feature A and thus, the manufacture (production) of the integrated product by the user is not applicable to the 'production of the object' according to the present corrected invention.

However, as being found as above, since the integrated product belongs to the technical scope of the present corrected invention, the manufacture (production) of the integrated product by the user should be considered to be applicable to the 'production of the object' according to the present corrected invention.

Therefore, the aforementioned allegation by the appellants cannot be employed."

- 4. Issue (4) (Establishment of the defense of invalidity)
- (1) Issue (4)a (Presence or absence of invalidation reason by violation of amendment requirements)

The appellants allege that the amendment of "the sheet is two-folded" in "the sheet is two-folded while a medicine is input from a hopper between them" in claim 1 at filing of the present application to the "two-fold sheet" in the present amendment is introduction of a new technical matter of the sheet folded in advance outside the medicine packaging device and is not within the range of the matters described in the description attached for the first time to the application at the filing (hereinafter referred to as the "description at the filing", Exhibit Otsu 31) and thus, the present patent has an invalidation reason by violation of amendment requirements (Article 17-2, paragraph 3, Article 123, paragraph 1, item (i) of the Patent Act).

By examining that, paragraph [0018] in the description at filing has the description that "the packaging portion is provided such that, after a predetermined amount of the medicine is input from a hopper 5 when it is two-folded by a triangular plate 4, a width direction and both side edge parts are heat-sealed by a heating roller 6 having a perforation cutter at a predetermined interval into a band shape."

However, with regard to the configuration of the medicine packaging paper, from the description in Exhibit Otsu 22 (Unexamined Patent Application Publication No. 1984-115223) "In the past, as illustrated in Figs. 1 to 3, the packaging paper 5X accommodated in the medicine packaging machine in a two-folded state was taken up by a bobbin-type winding core member 3X or a reel-type winding core member 4 which will be described later." (page 1, lower left column, lines 17 to 20), "As illustrated in Figs. 4 to 6, at a reference position where supply and exchange are required after a regulated amount of the two-folded packaging paper

conventionally used by being wound in the winding core member is expended; that is, on a surface which is a front surface side of the packaging paper 5 having gone through a limited distance L from a final end toward an initial end direction, a magnetic body layer 6 (a magnetic piece molded by a magnetic powder or mixing the magnetic powder in synthetic rubber or the like, for example) having a sufficient area with which a well-known magnetic sensor 9 used in this type of medicine packaging machine is in direct in contact and detects the magnetic force is formed in a one-body state exposed form by printing, bonding, or the like so as to configure the packaging paper 5 with magnetism." (page 2, lower right column, lines 6 to 17) and the description of Fig. 4 (see Attachment 2) and the description in Exhibit Otsu 23 (Utility Model Publication No. 1986-45074) that "in the medicine packaging machine configured to continuously perform a packaging operation by alternately repeating an operation of supplying a certain volume (certain weight) of the medicine between folds of the two-fold packaging paper taken up on an outer side of a winding core and an operation of sealing an open portion by rewinding a certain length of the packaging paper after the supply of the medicine, ..." (column 1, lines 11 to 16), it is found that, in the roll paper used in the medicine packaging device, presence of the one in which the two-fold sheet is wound around the core tube in a roll state (double type) was a matter of common general technical knowledge at the time of the priority date of the present application (priority date: September 20, 1996).

By considering the aforementioned common general technical knowledge, the description in paragraph [0018] in the description at the filing that "The packaging portion is provided such that, ... a predetermined amount of the medicine is input from a hopper 5 when it is two-folded by a triangular plate 4" can be understood such that a fold is made in the sheet by the triangular plate 4 of the packaging portion into the V-shape, and the sheet folded into two-fold in advance before being conveyed to the packaging portion is opened into the V-shape as double-type roll paper not only when the medicine is input between them, and a case where the medicine is input into the opening portion between them is also assumed.

Then, it is found that the new technical matter is not introduced in the relationship with the technical matter introduced by putting together all the descriptions in the description at the filing by amending the "sheet is

two-folded" in claim 1 at the filing to the "two-fold sheet".

Therefore, since it is found that the aforementioned amendment is within the range of the matters described in the description at the filing, the aforementioned allegation by the appellants is not grounded.

- (2) Issue (4)b (Presence or absence of invalidation reason by violation of clarity requirements)
 - A. "Position capable of detection by the angular sensor"

The correction was submitted as follows and those described in No. 4, 4(1) in the "Facts and reasons" in the judgment in prior instance are cited.

- (A) Each of the "present inventions" on pages 43, 24, and 44, line 10 in the judgment in prior instance is revised to the "present corrected invention".
- (B) The description on page 44, lines 19 to 21 in the judgment in prior instance is revised as follows:

"Therefore, since the contents of the 'position capable of detection by the angular sensor' in the present corrected invention are clear, the aforementioned allegation by the appellants is not grounded."

B. The "two-fold sheet"

The appellants allege that the "two-fold sheet" is unclear, since what form of the sheet the "two-fold sheet" in the corrected invention includes cannot be clearly grasped.

However, as described in 2(2) above, the configuration of the "two-fold sheet" of the present corrected invention can be understood to refer to a state where the medicine packaging paper is folded into the V-shape in the conveying direction, regardless of whether the medicine packaging paper has been folded into two (double type) or not (single type) outside the device in advance. Moreover, paragraphs [0012] and [0018] in the description have the description that the medicine packaging paper is brought into a state folded into the V-shape in the conveying direction so that the medicine can be input easily; that is, it is two-folded. By considering this description, what state the "two-fold" refers to can be clearly understood.

Therefore, the contents of the "two-fold sheet" in the present corrected invention are clear and thus, the aforementioned allegation by the appellants is not grounded.

C. The phrase "used"

The appellants allege that, if the phrase "used" in constituent feature A only needs to have configuration capable of being used in a medicine packaging device which satisfies constituent feature A, satisfaction of the features such as "between the hollow shaft and the fixed supporting plate of the support shaft", the "length-measuring sensor", "the sheet feeding length on the sheet feeding path to the packaging portion is measured", "fed out by the sheet feeding roller", and "a shift of the hollow shaft is detected" in constituent feature A does not have to be determined and thus, even if the roll paper is used in the medicine packaging device which does not satisfy any one of these features, there is a concern that the roll paper also constitutes infringement and thus, the feature of "used" in constituent feature A makes extension of the patent invention unclear and gives unexpected disadvantage to a third party and therefore, it violates the clarity requirements.

However, as found in the aforementioned 2(1)A, since the phrase "used" in the present corrected invention can be clearly understood to mean "capable of being used", the aforementioned allegation by the appellants is not grounded.

D. Summary

As described above, since the contents of the "position capable of detection by the angular sensor", the "two-fold sheet", and "used" in the present corrected invention are all clear and the description in the scope of claims (Claim 1) of the present corrected invention is found such that the invention to be granted a patent is clear, the present patent complies with the clarity requirements.

Therefore, the allegation by the appellants on violation of the clarity requirements of the present patent is not grounded.

- (3) Issue (4)c (Presence or absence of invalidation reason by violation of support requirements)
- A. As described in the aforementioned (2)B, paragraphs [0012] and [0018] in the description have the description on the "two-fold sheet" of the present corrected invention, and the present corrected invention is found to be described in "Detailed Description of the Invention" in the description.
 - B. The appellants allege that, if the roll paper for packaging medicine

including the magnet detected by the angular sensor of the medicine packaging device but not having the configuration of detecting the wound amount of the roll paper by detecting the detection signals of the angular sensor and the length-measuring sensor or the configuration of detecting the wound amount of the sheet and giving the sheet tension according to the wound amount of the sheet to the hollow shaft is included in the technical scope of the present corrected invention if it can be used for the medicine packaging device which satisfies constituent feature A, such roll paper for packaging medicine cannot solve the problem of the present corrected invention and thus, it lacks the support requirements of the description.

However, the roll paper for packaging medicine alleged by the appellants cannot be considered to belong to the technical scope of the present corrected invention and thus, the aforementioned allegation by the appellants misses the premise and is not grounded.

- C. As described above, the allegation by the appellants on violation of the support requirements of the present patent is not grounded.
- (4) Issue (4)d (Presence or absence of invalidation reason by lack of novelty of the present corrected invention with Exhibit Otsu 60 as the primary cited reference)

A. The appellants allege that the present application does not satisfy the requirements of division of application since, although the description in the original application describes that the problem of the invention is solved by controlling the braking force at least on the basis of the detection signal of the length-measuring sensor, the present corrected invention is only an invention of the object "roll paper", and if it is found to be roll paper which can be used in the medicine packaging device in which "an angular sensor is provided on the support shaft for detecting a rotation speed of the roll paper are in contact", "means for detachably fixing the roll paper to the hollow shaft and integrally rotating both at fixing thereof is provided on an end where the roll paper and the hollow shaft", and a plurality of magnets are provided at positions capable of detection by the angular sensor, the matters such as detection of the detection signal of the length-measuring sensor or detection of the wound amount of the sheet on the basis of that and giving the sheet tension according to the wound amount of the sheet to the hollow shaft are not included in the gist of the present corrected invention and thus, the description describes technical matters exceeding the solution of the

problem of the invention described in the description in the original application, which is applicable to addition of new matter.

However, since it is found that the description in original application has description on the matters described in the scope of claims (Claim 1) of the present corrected invention (Claim 3, paragraphs [0005] to [0009], [0012], [0016] to [0019], [0043] to [0051], [0108]), the present corrected invention is found to be within the range of the matters described in the description in the original application.

Therefore, the aforementioned allegation by the appellants is not grounded.

B. The appellants allege that, since the description in paragraph [0010] in the description is not described in the description in the original application, and in the method in which the projecting portion is provided on the end of the hollow core tube according to the description in the aforementioned paragraph [0010], an operation of attachment to the rotation support shaft is heavy, and there is a concern that the projecting portion hits and damages peripheral devices during the operation, which is not preferable, cannot be regarded as a matter of common general technical knowledge at the time of the priority date of the original application and thus, the description in paragraph [0010] is applicable to addition of new matter, and the present application does not satisfy the requirements of division of application.

By examining that, paragraph [0010] in the description describes that "Moreover, with regard to the method of providing the projecting portion on the end of the hollow core tube, since the lengthy roll paper as above has a considerable weight as a whole, an operation of attachment to the rotating support shaft becomes heavy, and there is a concern that the projecting portion hits and damages devices in the periphery during the operation and thus, the method of providing the projecting portion is not preferable."

In view of the description in paragraph [0008] in the description that "... Methods of detecting the change in the winding diameter of roll paper other than the method by the aforementioned winding-diameter detection sensor as such include ... a method of providing a projecting portion on an end of the hollow core tube of the roll paper and reading a mark provided on the projecting portion by a photosensor or the like.", the description in paragraph [0010] can be understood to specifically describe the problem of

the "method of providing the projecting portion on an end of the hollow core tube" which is one of the "methods of detecting the change in the winding diameter of roll paper other than the method by the aforementioned winding-diameter detection sensor" as a problem of the "method of providing a projecting portion on an end of the hollow core tube".

However, although the description in original application does not have description corresponding to paragraphs [0008] and [0010] in the present description but on the other hand, the present corrected invention is an invention which solves the problem (paragraphs [0004] to [0006]) by the method of detecting the change in the wound amount by use of the sheet in steps by the winding-diameter detection sensor (paragraphs [0004] to [0006]) and has an "object to provide a roll paper for packaging medicine used in a medicine packaging device ... and which can give rotational angle data to the angular sensor in the paper feeding portion of the packaging device" (paragraph [0011]) and does not have an object to solve the conventional problem of the "method of providing a projecting portion on an end of the hollow core tube", the description in paragraph [0010] in the description does not give an influence to the technical meaning of the present corrected invention and does not introduce a new technical matter to the description in original application.

Therefore, the aforementioned allegation by the appellants that the description in the paragraph [0010] is applicable to addition of new matter is not grounded.

C. As described above, the allegation by the appellants on lack of novelty with Exhibit Otsu 60 of the present corrected invention as a primary cited reference on the basis of non-satisfaction of the requirements of division by the present application lacks the premise and has no ground.

(5) Issue (4)e (Presence or absence of invalidation reason by lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference)

The appellee alleges that [i] after the appellants alleged the defense of invalidity in the court of prior instance, only the appellant Nissin made a request for another invalidity trial seeking invalidation of the present patent and alleged, as invalidation reasons by the invention according to Claims 1 and 2 at registration of establishment of the present patent, violation of the

clarity requirement ("invalidation reason 1"), lack of novelty ("invalidation reason 2") with the "trial Exhibit Ko 1" (Exhibit Otsu 22) as the primary cited reference, lack of inventive step ("invalidation reason 3") with "trial Exhibit Ko 1) (Exhibit Otsu 22) as the primary cited reference and the matter (Exhibit Ko 7 matter") described in the "trial Exhibit Ko 7" (Exhibit Otsu 49) as the sub cited reference, lack of inventive step ("invalidation reason 4") with the "trial Exhibit Ko 2" (Exhibit Otsu 23) as the primary cited reference and the matter ("Exhibit Ko 1 matter") described in "trial Exhibit Ko 1" (Exhibit Otsu 22) and the like as sub cited references, and lack of inventive step ("invalidation reason 5") with "trial Exhibit Ko 2" (Exhibit Otsu 23) as the primary cited reference and "Exhibit Ko 7 matter" and the like as sub cited references, but another JPO decision was non-establishment of the claim, since none of the aforementioned invalidation reasons 1 to 5 alleged by the appellant Nissin was grounded and then, since the appellant Nissin did not institute a suit against another trial decision made by the JPO, another JPO decision was finalized before rendering of the judgment in prior instance; and [ii] since the invalidation reason by the lack of inventive step with Exhibit Otsu 22 as the primary cited reference alleged by the appellants was based on substantially the same facts and evidence as "invalidation reason 3" in another invalidation trial, the allegation of the defense of invalidity by the aforementioned invalidation reasons in this court by the three parties; that is, the appellant Nissin who is a claimant of another invalidation trial as well as the appellant Seiey and the appellant OHU having a close trade relationship with the appellant Nissin, contradicts the principle of faith in the lawsuits and cannot be approved and thus, judgment is made as follows.

A. According to the basic facts in No. 2, 1 and one case record, the following facts are found as a history and the like of the present lawsuit:

(A) The appellant Nissin started to sell the defendant's product jointly developed by the appellants Nissin and Seiey to dispensing pharmacies and the like around December of 2014.

The three parties; that is, the appellant Nissin, the appellant OHU, and the appellant Seiey, had a continuous trade relationship related to the defendant's product, that the appellant Nissin places an order of the defendant's product from the appellant OHU, the appellant OHU who received this order entrusts manufacture of the defendant's product with the

appellant Seiey, the entrusted appellant Seiey manufactures the defendant's product and supplies it to the appellant Nissin and as a result, the appellant Seiey sells the defendant's product to the appellant OHU and the appellant OHU sells the same to the appellant Nissin.

(B) The appellee alleged on July 4, 2016 that the manufacture and sales of the defendant's product by the appellants are applicable to indirect infringement or the like of the present patent right owned by the appellee and instituted this lawsuit in the court of prior instance, seeking joint payment of damages against the appellants based on the tort of the present patent right infringement.

The appellants alleged the defense of invalidity by the invalidation reasons of violation of clarity requirements, lack of novelty with Exhibit Otsu 22 as the primary cited reference, and lack of novelty with Exhibit Otsu 23 as the primary cited reference on the basis of the preparatory document (2) (invalidation argument) on the date of the second preparatory proceedings in the court of prior instance on December 8 of the same year and alleged defense of invalidity by the invalidation reasons of lack of inventive step with Exhibit Otsu 22 as the primary cited reference, lack of inventive step with Exhibit Otsu 23 as the primary cited reference, violation of requirement for amendment, violation of support requirements, and violation of clarity requirements (related to the "two-fold sheet") on the basis of the preparatory document (5) (invalidation argument) on the date for the fourth preparatory proceedings in the court of prior instance on March 16, 2017 in addition to the aforementioned invalidation reasons.

After that, the appellants newly alleged the defense of invalidity by the invalidation reason of lack of inventive step with Exhibit Otsu 23 (Exhibit Otsu 23' invention) as the primary cited reference and Exhibit Otsu 22 (Exhibit Otsu 22 invention) as the sub cited reference on the basis of the preparatory document (7) (invalidation argument) on the date for the sixth preparatory proceedings in the court of prior instance on June 30 of the same year.

(C) The appellant Nissin requested another invalidation trial seeking invalidation of the patent on the invention according to claims 1 and 2 at registration of establishment of the present patent on July 10, 2017. The

invalidation reasons alleged by the appellant Nissin in another invalidation trial were violation of clarity requirements ("invalidation reason 1"), lack of novelty ("invalidation reason 2") with "trial Exhibit Ko 1" (Exhibit Otsu 22) as the primary cited reference, lack of inventive step ("invalidation reason 3") with "trial Exhibit Ko 1" (Exhibit Otsu 22) as the primary cited reference and the matter ("Exhibit Ko 7 matter") described in "trial Exhibit Ko 7" (Exhibit Otsu 49) as the sub cited reference, lack of inventive step ("invalidation reason 4") with "trial Exhibit Ko 2" (Exhibit Otsu 23) as the primary cited reference and the matter (Exhibit Ko 1 matter") and the like described in "trial Exhibit Ko 1" (Exhibit Otsu 22) and the like as the sub cited reference, and lack of inventive step ("invalidation reason 5") with "trial Exhibit Ko 2" (Exhibit Otsu 23) as the primary cited reference and the "Exhibit Ko 7 matter" and the like as the sub cited reference. aforementioned "invalidation reason 3" is based on substantially the same facts and evidence as the invalidation reason by the lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference, and the aforementioned "invalidation reason 4" and "invalidation reason 5" are based on substantially the same facts and evidence as the invalidation reason by the lack of inventive step of the present corrected invention with Exhibit Otsu 23 as the primary cited reference.

The appellee made the present correction in another invalidation trial on October 6 of the same year and then, alleged re-defense of correction related to the correction with the identical contents to the present correction on the basis of the seventh preparatory document on the date for the ninth preparatory proceedings in the court of prior instance on the 19th of the same month. Moreover, the appellants submitted the trial request (Exhibit Otsu 46) of another invalidation trial on the date for the aforementioned preparatory proceedings as written evidence.

The appellants put forward a counterargument to the re-defense of the correction by the appellee on the basis of the preparatory document (9) on the date for the tenth preparatory proceedings in the court of prior instance on December 11 of the same year.

The authorized judge of the court of prior instance ended proceedings of the infringement argument of the present case on the date for the eleventh preparatory proceedings in the court of prior instance on January 29, 2018 and stated that proceedings of the damage argument will be proceeded with.

On the date for the twelfth preparatory proceedings in the court of prior instance on March 12 of the same year, the appellants submitted the "oral proceedings statement brief (2)" (Exhibit Otsu 56) as of February 2 of the same year prepared by the appellee related to another invalidation trial as written evidence.

(D) On June 26, 2018, the Japan Patent Office admitted the present correction but rendered another trial decision that the request for another invalidation trial is dismissed, since the present patent cannot be invalidated by "invalidation reason 1" to "invalidation reason 5" alleged by the appellant Nissin. After that, since the appellant Nissin did not institute a suit against trial decision made to the other trial decision within a limitations for filing an action, the other trial decision was finalized and the final registration of the gist was executed on August 28 of the same year.

The court of prior instance concluded the oral argument on the date for the second oral argument in the court of prior instance on the 24th of the same month and then, rendered the judgment in prior instance which partially admitted the claim by the appellee on December 18 of the same year. The judgment in prior instance judged that none of the defense of invalidity alleged by the appellants was grounded.

(E) The appellant instituted the present appeal on December 28, 2018.

After that, the appellant alleged in the written reason of appeal as of February 15, 2019 that the judgment in prior instance has an error in judgment of the invalidation reasons of lack of inventive step with Exhibit Otsu 22 as the primary cited reference, lack of inventive step with Exhibit Otsu 23 as the primary cited reference, violation of the clarity requirements, and violation of the support requirements, and newly alleged the invalidation reason of lack of inventive step with Exhibit Otsu 60 as the primary cited reference on the premise that the present application violated the requirements of division of application.

This court concluded the oral argument on the date for first oral argument of the present case on May 16, 2019.

B. Article 167 of the Patent Act provides for that, once the trial decision for patent invalidation is finalized, neither the parties nor intervenors may file

a request for either such kind of trial on the basis of the same facts or evidence. The gist of this provision is interpreted such that, since it is irrational to bring up an issue again on the basis of the same facts or evidence after the trial decision is finalized although the parties and the of exercise intervenors the preceding trial could much allegation/verification as possible in the preceding trial, a repeated request for invalidation trial by the same parties or intervenors is limited so as to prevent recurrence of the issue and to realize one-time solution for the issue. The prevention of recurrence of an issue or a request for one-time solution for the issue as above is applicable not only to the invalidation trial proceedings but also should be applicable to a case where a defendant of an infringement lawsuit makes a request for an invalidation trial by the same invalidation reason as the defense of invalidity together with the allegation of defense of invalidity under Article 104-3, paragraph 1 of the Patent Act and validity of the patent is examined in a so-called double track of the infringement proceedings and the invalidation proceedings.

Then, when the defendant of the infringement lawsuit alleges the defense of invalidity and makes a request for an invalidation trial by the invalidation reason based on the same facts and evidence as the defense of invalidity, if the decision of the JPO dismissing the request for the invalidation trial is finalized, to maintain the allegation of the aforementioned defense of invalidity in the infringement lawsuit contradicts the principle of faith in the lawsuits, and it is reasonable to interpret that such act is not approved in view of the gist of Article 2, the Code of Civil Procedure.

By considering this case from that viewpoint, according to the found facts in the aforementioned A, [i] the appellants alleged the defense of invalidity for the present patent by the invalidation reasons of violation of the clarity requirements, violation of the support requirements, lack of novelty, and lack of inventive step with Exhibit Otsu 22 as the primary cited reference, lack of novelty and lack of inventive step with Exhibit Otsu 23 as the primary cited reference, and the like in the court of prior instance of this lawsuit; [ii] Only the appellant Nissin in the appellants made a request for another invalidation trial seeking invalidation of the present patent and alleged "invalidation reason 1" to "invalidation reason 5" as the invalidation reason of the invention according to Claims 1 and 2 at

registration of establishment of the present patent, and the appellee made the present correction in another invalidation proceedings and then, the Japan Patent Office admitted the present correction but rendered another trial decision that the request for another invalidation trial is dismissed, since the present patent cannot be invalidated by "invalidation reason 1" to "invalidation reason 5" alleged by the appellant Nissin; and [iii] it is found that, since the appellant Nissin did not institute a suit against trial decision made by the JPO to the other JPO decision, the other JPO decision was finalized before the judgment in prior instance was rendered.

In addition, since it is found that the invalidation reasons of lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference alleged by the appellant Nissin in the court of prior instance and in this court are based on substantially the same facts and evidence as "invalidation reason 3" expelled in the finalized other JPO decision (aforementioned A(C)), allegation by the appellant Nissin of the defense of invalidity by the invalidation reason of lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference in this court contradicts the principle of faith in the lawsuits and should be interpreted not to be approved in view of the gist of Article 2, the Code of Civil Procedure.

C. Subsequently, by examining the appellant Seiey and the appellant OHU, [i] the appellant Seiey and the appellant OHU are neither the claimant nor an intervenor of another invalidation trial, but the three parties; that is, the appellant Nissin, the appellant OHU, and the appellant Seiey, had a continuous trade relationship related to the defendant's product such that the appellant Seiey sells the defendant's product to the appellant OHU, and the appellant OHU sells the same to the appellant Nissin, and if the present patent is invalidated in the other invalidation trial, none of the claims by the appellee against the appellants is grounded and thus, the three appellants had common interests related to the other invalidation trial; and [ii] the appellant Seiey and the appellant OHU alleged the same defense of invalidity as the defense of invalidity alleged by the appellant Nissin in the court of prior instance and submitted the trial request for another invalidation trial (Exhibit Otsu 46) and the "oral proceedings statement brief (2)" (Exhibit Otsu 56) prepared by the appellee as written evidence

with the appellant Nissin and thus, it is found that the appellant Seiey and the appellant OHU sufficiently recognized the contents and history of the other invalidation trial and actually admitted the allegation/verification activities of the defendant Nissin in the other invalidation trial, and under the fact relationship of the aforementioned [i] and [ii], it is reasonable to find that the appellant Seiey and the appellant OHU are at a position which can be regarded equal to that of the appellant Nissin, who is the claimant of the another invalidation trial and thus, to approve the allegation by the appellant Seiey and the appellant OHU of the defense of invalidity by the invalidation reason of lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference based on substantially the same facts and evidence as "invalidation reason 3" expelled in the finalized other JPO decision should be considered nothing less than recurrence of the issue.

Therefore, it also contradicts the principle of faith in the lawsuits for the appellant Seidy and the appellant OHU to allege the defense of invalidity by the invalidation reason of lack of inventive step with Exhibit Otsu 22 as the primary cited reference in this court, similarly to the appellant Nissin, and should be interpreted not to be approved in view of the gist of Article 2, the Code of Civil Procedure.

- D. According to the above, since the aforementioned allegation by the appellee is grounded, even without judging the other points, the appellants' allegation on the lack of inventive step of the present corrected invention with Exhibit Otsu 22 as the primary cited reference is not grounded.
- (6) Issue (4)f (Presence or absence of invalidation reason by lack of novelty of the present corrected invention with Exhibit Otsu 23 as the primary cited reference)

The appellee alleges that, since the invalidation reason of lack of the inventive step with Exhibit Otsu 23 alleged by the appellants as the primary cited reference is based on substantially the same facts and evidence as "invalidation reason 4" and "invalidation reason 5" in the other invalidation trial, allegation of the defense of invalidity by the aforementioned invalidation reasons in this court by the three parties; that is, the appellant Nissin, who is the claimant of the other invalidation trial, as well as the

appellant Seiey and the appellant OHU who had a close trade relationship with the appellant Nissin, contradicts the principle of faith in the lawsuits and is not approved.

Then, by examining the above, the invalidation reason of the lack of inventive step of the present corrected invention with Exhibit Otsu 23 alleged by the appellants in the court of prior instance and this court as the primary cited reference is, as found in the aforementioned (5)A(C), found to be based on substantially the same facts and evidence as the "invalidation reason 4" and the "invalidation reason 5" expelled in the other JPO trial finalized between the appellant Nissin and the appellee.

Then, by the reason similar to those taught in the aforementioned (5)C and D, allegation by the appellants of the defense of invalidity by the invalidation reason of the lack of inventive step with Exhibit Otsu 23 as the primary cited reference in this court contradicts the principle of faith in the lawsuits and should be interpreted not to be approved in view of the gist of Article 2, the Code of Civil Procedure and thus, the aforementioned allegation by the appellee is grounded.

Therefore, even without judging the other points, the appellants' allegation on the lack of inventive step of the present corrected invention with Exhibit Otsu 23 as the primary cited reference is not grounded.

(7) Brief

As described above, none of the invalidation reasons alleged by the appellants is grounded, and the present patent is not found to be invalidated by the patent invalidation trial and thus, the appellants' defense of invalidity (limitation of exercise of the present patent right under Article 104-3, paragraph 1 of the Patent Act) is not grounded.

5. Issue (5) (The amount of damages of the appellee)

As described in Fourth 5 of the "Facts and reasons" in the judgment in prior instance, it is cited.

6. Conclusion

As described above, the claim by the appellee is grounded in that the payment is requested within limits of 970,768 yen and the delay damages thereto against the appellant Nissin from July 14, 2016 to completion of the

payment at the rate of 5% per annum (jointly with the appellant OHU for the amount of 485,384 yen in that and the delay damages thereto at the rate of 5% per annum from the same day to the completion of the payment and jointly with the appellant Seiey for the amount of 242,692 yen in that and the delay damages thereto at the rate of 5% per annum from the 15th of the same month to the completion of the payment), 485,383 yen and the delay damages thereto at the rate of 5% per annum from 14 of the same month to the completion of the payment against the appellant OHU (jointly with the appellant Nissin for the full amount and jointly with the appellant Seiey for the amount of 242,692 yen in that and the delay damages thereto at the rate of 5% per annum from the 15th of the same month to the completion of the payment), and 242,692 yen and the delay damages thereto against the appellant Seiev at the rate of 5% per annum from the same day to the completion of the payment (jointly with the appellant Nissin and the appellant OHU for the full amount), respectively, and the other points are not grounded.

Therefore, the judgment in prior instance with the same gist as that is reasonable, and all the present appeals by the appellants shall be dismissed, and the judgment is rendered as in the main text.

Intellectual Property High Court, Fourth Division

Presiding judge: OTAKA Ichiro

Judge: FURUKAWA Kenichi

Judge: OKAYAMA Tadahiro

Attachment 1

FIG. 1

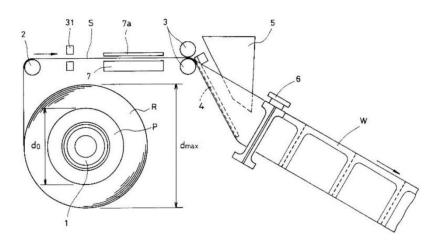


FIG. 2

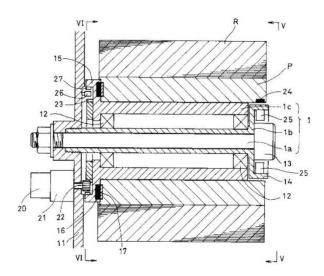


FIG. 3

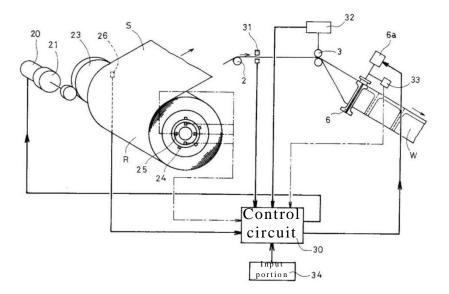


FIG. 4

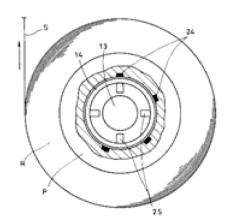


FIG. 5

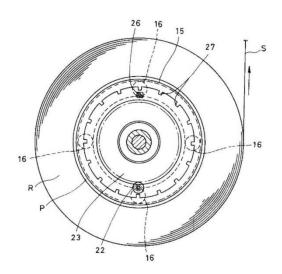


FIG. 6

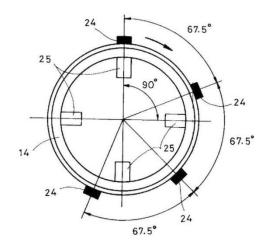


FIG. 7

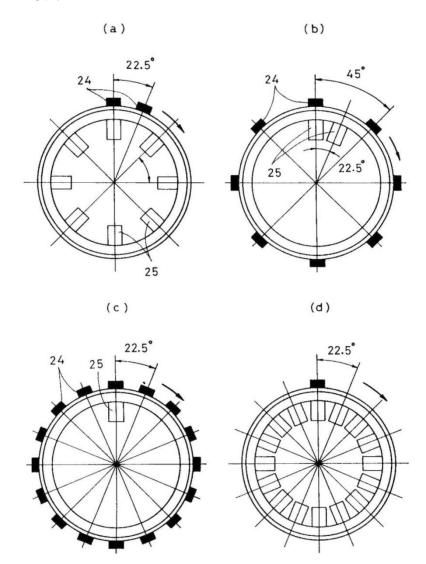
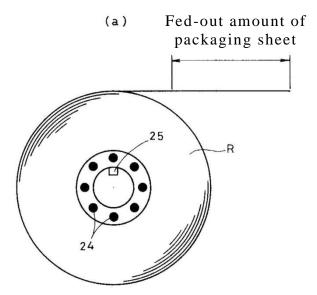
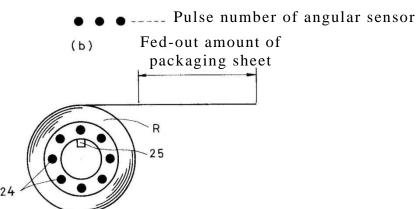


FIG. 8(a)





Pulse number of angular sensor

Attachment 2

FIG. 4

