Patent	Date	March 25, 2021	Court	Intellectual Property High
Right	Case	2020 (Gyo-Ke) 10063		Court, Second Division
	number			

- Whether it was necessary to receive a disposition under Article 14 of the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices for working a patented invention related to pharmaceuticals should be determined in light of the reasons for which the Patent Act institutes the system for extending a patent term, and in this process, the content of the disposition should be determined substantially from such perspective and should not be determined formally only on the basis of what is described as the "active components" in a certificate of marketing approval.

- A case in which the court determined that: in light of such factors as the significance in adopting the form of a salt for a pharmaceutical compound, the awareness of this among persons skilled in the art, the content of the tests conducted for applying for a marketing approval, and the information described in the package insert and interview form, it is inappropriate to determine formally that the active component of the pharmaceutical product subject to the disposition is "nalfurafine hydrochloride," which was described in the certificate of marketing approval; rather, it is appropriate to find that the subject pharmaceutical product substantially have, as its active components, both "nalfurafine," which is a free base that attracted attention in the examination for approval of the subject pharmaceutical product as a component having efficacy and effects, and "nalfurafine hydrochloride," which is its active ingredient mixed in the subject pharmaceutical product.

Case type: Rescission of Appeal Decision on Examiner's Decision to Refuse Application for Registration of Patent Term Extension

Result: Granted

References: Article 67, paragraph (4) of the Patent Act; Article 67, paragraph (2), Article 67-7, paragraph (1), item (i), and Article 67-3, paragraph (1), item (i) of the Patent Act prior to the amendment by Act No. 108 of 2016; Article 14 of the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices

Related rights, etc.: Patent No. 3531170, Application for Registration of Patent Term Extension No. 2017-700154

Decision of JPO: Appeal against Examiner's Decision of Refusal No. 2018-7539

Summary of the Judgment

1. This case is a lawsuit seeking rescission of an appeal decision made by the JPO in which the JPO rejected an appeal against an examiner's decision to refuse an application for registration of patent term extension regarding a patent right for an invention titled "Antipruritic agent" (hereinafter referred to as the "Invention"). The issue of this case is, in order to work the Invention, whether it was necessary to receive the disposition under Article 14 of the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices (hereinafter referred to as the "Pharmaceuticals and Medical Devices Act") for working a patented invention related to pharmaceuticals (the disposition in question is hereinafter referred to as the "Disposition").

2. In this judgment, the court rescinded the JPO decision, determining that it was necessary to obtain the Disposition in order to work the Invention. The court's determination is as outlined below.

(1) Whether it was necessary to obtain the Disposition in order to work the Invention A. The purpose of the system for registration of patent term extension is to allow the patentee to reclaim a period of time during which the patentee has been unable to work the patented invention because of the necessity to receive a Cabinet Order disposition. Therefore, whether it was necessary to receive the Disposition in order to work the Invention should be determined in light of the reasons for which the Patent Act institutes such system for extending a patent term, and in this process, the content of the Disposition should be determined substantially from such perspective and should not be determined formally only on the basis of what is described as the "active components" in a certificate of marketing approval under Article 14 of the Pharmaceuticals and Medical Devices Act. This view can be understood as conforming to the purport of the judgment of the Third Petty Bench of the Supreme Court, 2014 (Gyo-Hi) 356, rendered on November 17, 2015, Minshu Vol. 69, No. 7, at 1912.

(2) Taking into account such factors as the significance in adopting the form of a salt for a pharmaceutical compound, the awareness of this among persons skilled in the art, the content of the tests conducted for applying for a marketing approval, and the information described in the package insert and interview form, it is inappropriate to determine formally that the active component of the pharmaceutical product subject to the Disposition (hereinafter referred to as the "Pharmaceutical Product") is "nalfurafine hydrochloride," which was described in the certificate of approval. Rather, it is appropriate to find that the Pharmaceutical Product substantially have, as its active components, both "nalfurafine," which is a free base that attracted attention in the examination for approval of the Pharmaceutical Product as a component having efficacy and effects, and "nalfurafine hydrochloride," which is its active ingredient mixed in the Pharmaceutical Product.

Consequently, there is an error in the JPO decision in which the JPO considered "nalfurafine hydrochloride" as the sole active component of the Pharmaceutical Product and denied "nalfurafine" as its active component, and finally determined that it cannot be said that it was necessary to receive the Disposition in order to work the Invention.

Judgment rendered on March 25, 2021

2020 (Gyo-Ke) 10063, Case of seeking rescission of the JPO decision

Date of conclusion of oral argument: January 26, 2021

Judgment

Plaintiff: Toray Industries, Inc.

Defendant: Commissioner of the Japan Patent Office

#### Main text

1. The decision made by the Japan Patent Office (JPO) on March 30, 2020, concerning the case of Appeal against Examiner's Decision of Refusal No. 2018-7539 shall be rescinded.

2. The Defendant shall bear the court costs.

Facts and reasons

No. 1 Claim

Same as the main text.

No. 2 Outline of the case

This case is a lawsuit seeking rescission of an appeal decision made by the JPO where the JPO rejected an appeal against an examiner's decision to refuse an application for registration of patent term extension. The issue is whether the application for registration of patent term extension falls under Article 67-3, paragraph (1), item (i) of the Patent Act prior to the amendment by Act No. 108 of 2016 (hereinafter referred to as "Former Patent Act") or not.

1. Outline of procedures

(1) The Plaintiff filed a patent application (Patent Application No. 1998-524506) on November 21, 1997 (priority date: November 25, 1996 [hereinafter referred to as the "Priority Date"]; priority country: Japan) for an invention titled "Antipruritic agent" and registration of the patent right was established as Patent No. 3531170 on March 12, 2004 (Exhibits Ko 2 and 3; number of claims: 36; hereinafter this patent is referred to as the "Patent"; the invention related to each claim is referred to as "Invention 1," etc. in the order of the claims, and these inventions are collectively referred to as the "Invention"; and description and drawings related to the Patent are collectively referred to as the "Description").

(2) The Plaintiff filed an application for registration of patent term extension for the Patent (Application No. 2017-700154; hereinafter referred to as the "Application for Registration of Patent Term Extension") on June 29, 2017 (Exhibit Ko 1 and the entire import of oral arguments) and amended the application based on a written amendment dated October 15, 2019 (Exhibit Ko 57) and a written amendment dated February 10, 2020 (Exhibit Ko 94).

The Application for Registration of Patent Term Extension after the aforementioned amendments stated that the disposition that was required to be received as provided for in Cabinet Order set forth in Article 67, paragraph (2) of the Former Patent Act concerning the period for which the extension is requested and the working of the patented invention (hereinafter referred to as the "Disposition") was as follows.

A. The period for which the extension was requested: Until November 26, 2022

B. Disposition that is the grounds for registration of patent term extension:

The approval under Article 14, paragraph (1) of the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices (hereinafter referred to as the "Pharmaceuticals and Medical Devices Act") for pharmaceuticals as provided for in said paragraph.

C. Number to identify the disposition:

22900AMX00538000

D. Date of disposition:

March 30, 2017

E. Pharmaceutical subject to the disposition (hereinafter referred to as the "Drug") Brand name: Remitch OD Tablets 2.5µg

Active component: Nalfurafine hydrochloride (Nonproprietary name: INN nalfurafine) (The active component is indicated as nalfurafine hydrochloride 2.5µg (2.32µg as nalfurafine) in [COMPOSITION AND PRODUCT DESCRIPTION] of the package insert (Reference 4 of materials indicating the grounds for extension; hereinafter referred to as the "Package Insert") of Remitch OD Tablets 2.5µg.)

Structural formula



F. Specific use of the pharmaceutical subject to the disposition:

Improvement of pruritus in the following patients (limited to cases where the effects of existing treatments are not sufficient):

Patients under hemodialysis, patients with chronic liver disease

(3) The Application for Registration of Patent Term Extension was refused as of March 5, 2018 (Exhibit Ko 21) and therefore the Plaintiff filed an appeal against the examiner's decision of refusal (hereinafter referred to as the "Appeal") on June 1, 2018 (Exhibit Ko 22). The JPO examined the appeal as a case of Appeal against Examiner's Decision of Refusal No. 2018-7539 and made the decision that "the examiner's decision of refusal shall be maintained" (hereinafter referred to as "JPO Decision") on March 30, 2020. A certified copy of the ruling was served upon the Plaintiff on April 14, 2020, and the Plaintiff filed this lawsuit.

2. Summary of the Invention

Descriptions of the clams in claims 1 through 10, 15, 21, 26, and 31 through 36 of the Patent are as below.

[Claim 1]

An antipruritic agent whose active component is opioid  $\kappa$  receptor operated compound that is expressed in the following General Formula (I):



[In the formula,

#### <u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aryl having 6 to 12 carbons, aralkyl having 7 to 13 carbons, alkenyl having 4 to 7 carbons, allyl, furan-2ylalkyl having 1 to 5 carbons, or thiophene-2-ylalkyl having 1 to 5 carbons; R<sup>2</sup> refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkyl having 1 to 5 carbons, or -NR<sup>9</sup>R<sup>10</sup>; R<sup>9</sup> refers to hydrogen or alkyl having 1 to 5 carbons;  $R^{10}$  refers to hydrogen, alkyl having 1 to 5 carbons, or -C(=O) $R^{11}$ -;  $R^{11}$  refers to hydrogen, phenyl, or alkyl having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanovloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons; A refers to -XC (=Y)-, -XC (=Y)Z-, -X-, or -XSO<sub>2</sub>- (X, Y, and Z as used here independently refer to NR<sup>4</sup>, S, or O, respectively;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or aryl having 6 to 12 carbons;  $R^4$  as used in the formula may be identical or different); B refers to valence bond, straight chain or branched alkylene having 1 to 14 carbons (it may be substituted with at least one or more types of substituents selected from a group consisting of alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, trifluoromethyl, and phenoxy, and 1 to 3 pieces of methylene group may be substituted with carbonyl group), straight chain or branched acyclic unsaturated hydrocarbons having 2 to 14 carbons and containing 1 to 3 pieces of double-bond and/or triple-bond (it may be substituted with one or more types of substituents selected from a group consisting of alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, trifluoromethyl, and phenoxy, and 1 to 3 pieces of methylene group may be substituted with carbonyl group), or straight chain or branched saturated or unsaturated hydrocarbons having 1 to 14 carbons and containing 1 to 5 pieces of thioether bond, ether bond, and/or amino bond (the heteroatom does not bond to A directly and 1 to 3 pieces of methylene group may be substituted with carbonyl group);  $\mathbb{R}^5$  refers to an organic group that has either hydrogen or any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy);  $R^6$  refers to hydrogen;  $R^7$  refers to hydrogen, hydroxy, alkoxy having 1 to 5 carbons, and alkanoyloxy having 1 to 5 carbons; or  $R^6$  and  $R^7$  jointly refers to -O-, -CH<sub>2</sub>-, and -S-;  $R^8$  refers to hydrogen, alkyl having 1 to 5 carbons, or alkanoyl having 1 to 5 carbons; in addition, General Formula (I) includes (+) body, (-) body, and (±) body].

## [Claim 2]

The antipruritic agent as defined in Claim 1 where, in the preceding General Formula (I),  $R^1$  is methyl, ethyl, propyl, butyl, isobutyl, cyclopropylmethyl, allyl, benzil, or phenethyl;  $R^2$  and  $R^3$  are independently hydrogen, hydroxy, acetoxy, or methoxy; A is -XC (=Y)- (X as used here refers to NR<sup>4</sup>, S, or O; Y as used here refers to O;  $R^4$  refers to hydrogen or alkyl having 1 to 5 carbons), -XC (=Y)Z-, -X-, or -XSO<sub>2</sub>- (X as used here refers to NR<sup>4</sup>; Y refers to O or S; Z refers to NR<sup>4</sup> or O; and R<sup>4</sup> refers to hydrogen or alkyl having 1 to 5 carbons); B is straight chain alkylene having 1 to 3 carbons; R<sup>6</sup> and R<sup>7</sup> jointly refers to -O-; and R<sup>8</sup> is hydrogen.

[Claim 3]

The antipruritic agent as defined in Claim 2 where, in the preceding General Formula (I), A is -XC (=Y)- or -XC (=Y)Z- (X as used here refers to  $NR^4$ ; Y refers to O; Z refers to O; and  $R^4$  refers to alkyl having 1 to 5 carbons).

[Claim 4]

The antipruritic agent as defined in Claim 2, in the preceding General Formula (I), where  $R^2$  is expressed in an organic group containing either hydrogen or any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy).

[Claim 5]

The antipruritic agent as defined in Claim 4 where, in the preceding General Formula (I), A is expressed as -XC (=Y)- or -XC (=Y)Z- (X as used here refers to NR<sup>4</sup>; Y refers to O; Z refers to O, and R<sup>4</sup> refers to alkyl having 1 to 5 carbons).

[Claim 6]

The antipruritic agent as defined in Claim 1 where, in the preceding General Formula (I),  $R^1$  is methyl, ethyl, propyl, butyl, isobutyl, cyclopropylmethyl, allyl, benzil, or phenethyl;  $R^2$  and  $R^3$  are independently hydrogen, hydroxy, acetoxy, or methoxy, respectively; A is -XC (=Y)- (X as used here refers to NR<sup>4</sup>; Y refers to O;  $R^4$  refers to alkyl having 1 to 5 carbons), B is -CH=CH-, -C=C-, -CH<sub>2</sub>O-, or -CH<sub>2</sub>S-;  $R^6$  and  $R^7$  are jointly -O-; and  $R^8$  is hydrogen.

[Claim 7]

The antipruritic agent as defined in Claim 6 where, in the preceding General Formula (I), where  $R^5$  is expressed in an organic group containing either hydrogen or any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group

consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy).

## [Claim 8]

The antipruritic agent as defined in Claim 6 where, in the preceding General Formula (I), B is -CH=CH- or -C≡C-.

[Claim 9]

The antipruritic agent as defined in Claim 8 where, in the preceding General Formula (I), where  $R^5$  is expressed in an organic group containing either hydrogen or any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy).

[Claim 10]

An antipruritic agent whose active component is opioid  $\kappa$  receptor operated compound that is expressed in General Formula (II):



[In the formula,

<u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons, or alkyl having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, - CH=CH-, or -C=C-;  $R^5$  refers to an organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy);  $R^6$  refers to alkyl having 1 to 5 carbons and allyl; X<sup>-</sup> refers to its pharmacologically allowed counterion addition salt; In addition, General Formula (II) includes (+) body, (-) body, and (±) body].

#### [Claim 15]

An antipruritic agent whose active component is opioid  $\kappa$  receptor operated compound or its pharmacologically allowed acid addition salt that is expressed in the following General

Formula (III):



[In the formula,

<u>····</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons, or alkyl having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, - CH=CH-, or -C=C-;  $R^5$  refers to organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy); In addition, General Formula (III) includes (+) body, (-) body, and ( $\pm$ ) body].

[Claim 21]

A quaternary morphinan ammonium salt derivative that is expressed in General Formula (II):



[In the formula,

<u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, - CH=CH-, or -C=C-;  $R^5$  refers to an organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy);  $R^6$  is alkyl or allyl having 1 to 5 carbons; X<sup>-</sup> refers to pharmacologically allowed counterion addition salt; In addition, General Formula (II) contains (+) body, (-) body, and (±) body]. [Claim 26]

A morphine-N-oxide derivative or its pharmacologically allowed acid addition salt that is expressed in General Formula (III):



[In the formula,

<u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, - CH=CH-, or -C=C-;  $R^5$  refers to organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy); In addition, General Formula (III) includes (+) body, (-) body, and ( $\pm$ ) body].

[Claim 31]

The pharmaceuticals containing the quaternary morphinan ammonium salt derivative as defined in Claims 21 through 25.

[Claim 32]

The pharmaceuticals containing morphine-N-oxide derivative or its pharmacologically allowed acid addition salt as defined in Claims 26 through 30.

[Claim 33]

A manufacturing method of a compound that is expressed in General Formula (II) that is characterized by converting tertiary amine that is expressed in General Formula (VIII):



into quaternary ammonium salt by using alkylating agent; and General Formula (II) is as follows:



(in the aforementioned General Formulas (VIII) and (II),

<u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, having 1 to 5 carbons, or alkyl having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, -CH=CH-, or -C=C-;  $R^5$  refers to an organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy.)

[Claim 34]

The manufacturing method as defined in Claim 33 where the alkylating agent is alkyl iodide having 1 to 5 carbons, alkyl bromide having 1 to 5 carbons, alkyl chloride having 1 to 5 carbons, alkyl methanesulfonate having 1 to 5 carbons, or dialkyl sulfate, allyl iodide, allyl bromide, or allyl chloride having 1 to 5 carbons.

## [Claim 35]

A manufacturing method of a compound that is expressed in General Formula (III) that is characterized by oxidizing tertiary amine that is expressed in General Formula (IX):



by using oxidizing agent; and General Formula (III) is as follows:



(in the aforementioned General Formulas (IX) and (III),

<u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alkyl having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons;  $R^2$  refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons, or alkyl having 1 to 5 carbons;  $R^3$  refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or allyl having 6 to 12 carbons; A refers to alkylene having 1 to 6 carbons, - CH=CH-, or -C=C-;  $R^5$  refers to an organic group containing any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy.)

[Claim 36]

The manufacturing method as defined in Claim 35 where the oxidizing agent is a peroxide of organic carboxylic acid, hydrogen peroxide, tert-butyl hydroperoxide, cumene hydroperoxide, or ozone.

3. Summary of the grounds for the Decision

(1) The Invention is roughly classified into [i] an invention related to a compound expressed as General Formula (I) (Inventions 1 through 9), [ii] an invention related to a compound expressed as General Formula (II) (Inventions 10 through 14, 21 through 25, 33, and 34), and [iii] an invention related to a compound expressed as General Formula (III) (Inventions 15 through 20, 26 through 32, 35, and 36). Nalfurafine is included in General Formula (I) and Inventions 2 through 9 depend on Invention 1. Therefore, whether the Drug fulfills matters required to identify Invention 1 or not is to be determined.

(2) A. The active component of the Drug is nalfurafine hydrochloride and falls under "pharmacologically allowed acid addition salt of opioid  $\kappa$  receptor operated compound that is expressed in General Formula (I)."

B. Regarding whether nalfurafine hydrochloride is contained in the "antipruritic agent whose active component is opioid  $\kappa$  receptor operated compound that is expressed in General Formula (I)" in Invention 1 or not

(A) Concerning the Patent, antipruritic agents whose active components are any of the pharmacologically allowed salt of all opioid  $\kappa$  receptor operated compounds that are expressed in General Formulas (I), (II), (III), (IV), (V), (VI), and (VII) were stated uniformly in the claim and description at the time of filing the application (Exhibit Otsu 1). However, based on the amendment dated July 16, 2001 (Exhibit Otsu 3; hereinafter referred to as the "Amendment") that was made in response to the notification of grounds for refusal dated April 24, 2001 (Exhibit Ko 153), the antipruritic agent whose active component is pharmacologically allowed salt was deleted from the patent claim only in cases of the compounds expressed in General Formula (I) and registration of the patent right was established.

In light of these developments concerning the application, it is construed that the antipruritic agent whose active component is "pharmacologically allowed acid addition salt of opioid  $\kappa$  receptor operated compound that is expressed in General Formula (I)," such as nalfurafine hydrochloride, etc., was included in the claim at the time of filing the application; however, it was eliminated from the claim by the Amendment.

(B) An antipruritic agent whose active component is "pharmacologically allowed acid addition salt of opioid  $\kappa$  receptor operated compound that is expressed in General Formula (I)," such as nalfurafine hydrochloride, etc., is stated in the Description; however, the Description has never been amended, and in some cases, it still contains matters that had been included in the claim at the time of filing the application but were eliminated from the claim when the registration of the patent right was established, such as an antipruritic agent whose active component is any opioid  $\kappa$  receptor operated compounds expressed in General Formulas (IV), (V), (VI), and (VII) or salt thereof. Based on the above, even if an antipruritic agent whose active component is "pharmacologically allowed acid addition salt of opioid  $\kappa$  receptor operated compound that is expressed in General Formula (I)" is stated in the Description, it cannot be immediately said that the antipruritic agent whose active component is the aforementioned acid addition salt is included in the Invention.

(C) The Plaintiff alleged that the "active component" of the Invention refers to a substance that shows effects in the human body (nalfurafine) and is not identical to the agonist (nalfurafine hydrochloride) that is contained in the "antipruritic agent," which is the Drug.

However, "component" refers to substances that constitute a mixture generally. In cases of pharmaceuticals, it is common general technical knowledge that "active

component" refers to the substance indicating drug efficacy from among substances constituting mixtures, which are pharmaceuticals (*Kojien*, 2nd revised edition, p. 1230, section of "Seibun (component)" [Exhibit Otsu 7] and *Hirokawa Yakkagaku Daijiten* (Hirokawa Pharmaceutical Science Dictionary), p. 855, section of "Seibun (component)," [Exhibit Otsu 8] and p. 1584, section of "Yuko Seibun (active component)," [Exhibit Ko 103]). Therefore, it should be construed that the "active component" of the "antipruritic agent" in Invention 1 refers to a substance that is included in the "antipruritic agent," which is a mixture, a pharmaceutical, and that constitutes the "antipruritic agent," and refers to a compound without adding salt as expressed in General Formula (I).

In the Description, the "agonist" is described as a substance that encourages the receptor and shows effects and the "agonist" and "active component" are used with the same meaning. In addition, it is not found that there is common general technical knowledge that the "agonist" refers to a substance constituting a pharmaceutical and the "active component" is a substance that shows drug efficacy in the human body. The aforementioned allegation of the Plaintiff in which nalfurafine hydrochloride and nalfurafine are distinguished as being the "agonist" and the "active component," respectively, cannot be adopted also from this point.

C. Consequently, it can be said that the Invention does not contain the Drug whose active component is nalfurafine hydrochloride and therefore it cannot be found that upon working the Invention, it was necessary to receive the disposition specified by Cabinet Order as set forth in Article 67, paragraph (2) of the Former Patent Act. The Application for Registration of Patent Term Extension falls under Article 67-3, paragraph (1), item (i) of the Former Patent Act and the registration of patent term extension cannot be obtained. 4. Grounds for rescission of the JPO decision alleged by the Plaintiff

(1) Grounds for rescission 1 (incorrect fact-finding concerning the active component of the Drug)

(2) Grounds for rescission 2 (wrong interpretation of Invention 1)

(3) Grounds for rescission 3 (wrong interpretation of laws and regulations)

(omitted)

No. 4 Judgment of this court

1. Invention

(1) There are the following statements in the Description (Exhibit Ko 2).

A. Technical field

"The Invention is related to an opioid k receptor operated compound that is helpful

for the treatment of itching caused by diseases accompanied by itching and an antipruritic agent containing the former" (lines 9 through 10 on page 12).

#### B. Background art

"Itching (pruritus) is a unique feeling in the skin and is often seen with various skin diseases accompanied by inflammation. It may also occur in some cases due to certain internal medicine diseases (malignant tumors, diabetes, liver disease, renal failure, renal dialysis, gout, thyroid disease, hematologic disease, or iron deficiency), pregnancy, or parasitic infection, or due to drug-induced or psychogenic causes in some cases.

Itching is a subjective feeing and therefore it is difficult to assess it quantitatively and objectively. The structure of itching expression has not been fully revealed.

Currently, histamine, substance P, bradykinin, proteinase, prostaglandin, opioid peptide, and other substances are known to be stimulants that cause itching. The perception of itching is considered to be caused when these itching stimulants act on multiple stimulation-responsive nerve terminals (itching receptors) that exist in the border area between the epidermis and dermis and the impulse caused by the action reaches, in order, the spinothalamic tract, thalamus, and cerebral cortex (...).

... Skin diseases where pruritus is subject to treatment are as listed below: atopic dermatitis, neurological dermatitis, contact dermatitis, seborrheic dermatitis, autosensitization dermatitis, caterpillar dermatitis, asteatosis, senile pruritus, insect bites, photosensitivity, urticaria, prurigo, blisters, impetigo, eczema, tinea, lichen, psoriasis, scabies, acne vulgaris, etc. As a visceral condition accompanied by pruritus, malignant tumors, diabetes, liver diseases, renal failures, renal dialysis, and pregnancy are particular problems.

For treatment of these types of pruritus, antihistamines, anti-allergic agents, etc. are mainly used as internal agents. Antihistamines, topical corticosteroids, nonsteroidal anti-inflammatory drugs, camphor, menthol, phenol, salicylic acid, tar, crotamiton, capsaicin, and other moisturizers (urea, Hirudoid, Vaseline, etc.) are used as topical agents. However, in cases of internal agents, the time required for the onset of action, depressant action on the central nervous system (sleepiness, malaise), gastrointestinal disorders, and other side effects become problems. At the same time, in cases of topical agents, insufficient antipruritic effects and, in particular in cases of topical steroids, adrenal hypofunction due to long-term use, rebounds, and other side effects become problems.

Concerning opioids and itching, it has been known that opioids have an analgesic action, while functioning as chemical mediators for itching. It was found that itching is caused as a side effect when morphine or opioid compound is administered extradurally or intrathecally (...), including a report that intrinsic opioid peptides, such as  $\beta$ -endorphin

or enkephalin, etc., cause itching (...). At the same time, it was also found that itching caused by morphine administered intrathecally was inhibited by morphine antagonist, naloxone, (...) and strong itching caused by increases in intrinsic opioid peptides in patients with biliary engorgement, which is liver disorder, was inhibited by opioid antagonist, nalmefene, (...). It was determined that opioid agonists have the action of generating itching and their antagonists have an antipruritic action in a uniform opinion.

As mentioned above, it has been considered that opioid agonists cause itching and their antagonists may act as antipruritic agents. However, application of opioid antagonists as antipruritic agents has not been realized" (line 12 on page 12 through line 21 on page 13).

C. Objective of the invention

"The objective of the Invention is to provide an opioid  $\kappa$  receptor agonist with extremely rapid and strong antipruritic action and an antipruritic agent containing the former that solved the aforementioned problem" (line 22 through line 23 on page 13).

D. Best mode for working the invention

"The existence of  $\mu$ ,  $\delta$ , and  $\kappa$  receptors are known as opioid receptors and intrinsic opioid peptides that stipulate each of them selectively has been discovered. In other

words, ...  $\beta$  -endorphin and enkephalin were identified as  $\mu$  and  $\delta$  receptor agonists

and dynorphin were identified as  $\kappa$  receptor operated intrinsic opioid peptides. However, the action on itching of  $\kappa$  receptor agonists, including dynorphin, had not been discovered and was made clear by the Invention for the first time.

If the  $\kappa$  receptor agonist as indicated in the Invention shows action with opioid  $\kappa$  receptors, its chemical structure specificity does not become a problem; however, it is preferable that it has a higher selectivity to  $\kappa$  receptors than  $\mu$  and  $\delta$  receptors. In more concrete terms, opioid  $\kappa$  receptor operated morphinan derivative or its pharmacologically allowed acid addition salt is cited. In particular, an opioid  $\kappa$  receptor-operated compound or its pharmacologically allowed acid addition salt that is expressed in General Formula (I):



[In the formula,

#### <u>...</u>

refers to a double bond or single bond;  $R^1$  refers to alkyl having 1 to 5 carbons, cycloalkyl alky having 4 to 7 carbons, cycloalkenyl alkyl having 5 to 7 carbons, aryl having 6 to 12 carbons, aralkyl having 7 to 13 carbons, alkenyl or allyl having 4 to 7 carbons, furan-2ylalkyl having 1 to 5 carbons, or thiophene-2-ylalkyl having 1 to 5 carbons; R<sup>2</sup> refers to hydrogen, hydroxy, nitro, alkanoyloxy having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkyl having 1 to 5 carbons, or -NR<sup>9</sup>R<sup>10</sup>; R<sup>9</sup> refers to hydrogen or alkyl having 1 to 5 carbons;  $R^{10}$  refers to hydrogen, alkyl having 1 to 5 carbons, or -C(=O) $R^{11}$ -;  $R^{11}$  refers to hydrogen, phenyl, or alkyl having 1 to 5 carbons; R<sup>3</sup> refers to hydrogen, hydroxy, alkanoyloxy having 1 to 5 carbons, or alkoxy having 1 to 5 carbons; A refers to -XC (=Y)-, -XC (=Y)Z-, -X-, or -XSO<sub>2</sub>- (X, Y, and Z as used here independently refer to NR<sup>4</sup>, S, or O, respectively;  $R^4$  refers to hydrogen, straight chain or branched alkyl having 1 to 5 carbons, or aryl having 6 to 12 carbons;  $R^4$  as used in the formula may be identical or different); B refers to valence bond, straight chain or branched alkylene having 1 to 14 carbons (it may be substituted with at least one or more types of substituents selected from a group consisting of alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, trifluoromethyl, and phenoxy, and 1 to 3 pieces of methylene group may be substituted with carbonyl group), straight chain or branched acyclic unsaturated hydrocarbons having 2 to 14 carbons and containing 1 to 3 pieces of double-bond and/or triple-bond (it may be substituted with one or more types of substituents selected from a group consisting of alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, trifluoromethyl, and phenoxy, and 1 to 3 pieces of methylene group may be substituted with carbonyl group), or straight chain or branched saturated or unsaturated hydrocarbons having 1 to 14 carbons and containing 1

to 5 pieces of thioether bond, ether bond, and/or amino bond (the heteroatom does not bond to A directly and 1 to 3 pieces of methylene group may be substituted with carbonyl group); R<sup>5</sup> refers to an organic group that has either hydrogen or any of the following basic structures:



(it may be substituted with at least one or more types of substituents selected from a group consisting of alkyl having 1 to 5 carbons, alkoxy having 1 to 5 carbons, alkanoyloxy having 1 to 5 carbons, hydroxy, fluorine, chlorine, bromine, iodine, amino, nitro, cyano, isothiocyanato, trifluoromethyl, trifluoromethoxy, and methylenedioxy);  $R^6$  refers to hydrogen;  $R^7$  refers to hydrogen, hydroxy, alkoxy having 1 to 5 carbons, or alkanoyloxy having 1 to 5 carbons; or  $R^6$  and  $R^7$  jointly refers to -O-, -CH<sub>2</sub>-, and -S-;  $R^8$  refers to hydrogen, alkyl having 1 to 5 carbons, or alkanoyl having 1 to 5 carbons; in addition, General Formula (I) includes (+) body, (-) body, and (±) body], ... not only one of these opioid  $\kappa$  receptor agonists but also multiple kinds of them can be used as active components.

Skin diseases accompanied by specific pruritus that are subject to treatment are as listed below: atopic dermatitis, neurological dermatitis, contact dermatitis, seborrheic dermatitis, autosensitization dermatitis, caterpillar dermatitis, asteatosis, senile pruritus, insect bites, photosensitivity, urticaria, prurigo, blisters, impetigo, eczema, tinea, lichen, psoriasis, scabies, acne vulgaris, etc. As a visceral condition accompanied by pruritus, pruritus caused by malignant tumors, diabetes, liver diseases, renal failures, renal dialysis,

and pregnancy are listed as particularly subject to treatment. In addition, they can be applied to itching accompanying diseases in ophthalmology and otorhinolaryngology" (lines 29 on page 13 through line 20 on page 17).

"Pharmacologically preferable acid addition salts for substances expressed in General Formulas (I), (III), (IV), (V), (VI), and (VII) among the aforementioned  $\kappa$  receptor agonists are hydrochloride, sulfate, nitrate, hydrobromide, hydroiodide, phosphate and other inorganic acid salts; acetate, lactate, citrate, oxalate, glutaric acid, malate, tartrate, fumarate, salt of mandelic acid, maleate, benzoate, phthalate and other organic carboxylates; methanesulfonate, etc. In particular, hydrochloride, hydrobromide, phosphate, tartrate, methanesulfonate, etc. are preferred, but not limited thereto.

These  $\kappa$  receptor agonists are purified for medical use and pass necessary safety testing. Then, they can be administered orally or parenterally without change or as a pharmaceutical composition mixed with publicly-known pharmacologically allowed acids, carriers, or fillers.

Tablets and capsules are used for oral preparations; however, topical agents are preferable for the treatment of skin diseases. ...

The content of  $\kappa$  receptor agonist in a pharmaceutical composition is not specified; however, it is usually prepared to be 0.1µg to 1,000mg per dose for oral preparation and 0.001ng/m<sup>2</sup> to 10mg/m<sup>2</sup> per application for topical agent" (line 25 on page 51 through line 15 on page 52).

#### E. Examples

"Example 9

Selective  $\kappa$  receptor operated opioid compounds, (-)-17- (cyclopropylmethyl)-3,14 $\beta$ dihydroxy-4,5 $\alpha$ -epoxy-6 $\beta$ -[N-methyl-trans-3-(3-furyl) acrylamide] morphinan hydrochloride 7,



were dissolved with saline and a solution with a concentration of  $40\mu g/mL$  was prepared. This solution was applied to three sites of flaring of urticaria on the lower legs of an adult male at a drug level of  $0.2\mu g/cm^2$ .

As a result, moderate itching (its grade is set as ++) was felt before application; however, no itching was felt within 5 minutes after application (its grade is set at -). No-itching status continued for approximately 5 hours.

Example 10

Compound 7 solution was applied on skin surface focus of arms and legs of a female patient with atopic dermatitis where she felt strong itching (its grade is set as +++). The solution was applied to 5 sites. Approximately  $50\mu$ L solution was applied to  $10\text{cm}^2$  at a drug level of  $0.2\mu$ g/cm<sup>2</sup>. Indometacin cream (drug level, 7.5mg/g) was applied as a comparison in the same way at a drug level of  $75\mu$ g/cm<sup>2</sup>.

As a result, as shown in Table 5, itching was completely eliminated within 5 minutes after application of Compound 7 solution and it was found to have a strong antipruritic action. No-itching status continued for at least 3 hours. On the other hand, itching remains in the sites where indometacin cream was applied and it was found that Compound 7 had superior antipruritic action to indometacin cream.

Table 5 Antipruritic actions of  $\kappa$  receptor agonist (Compound <u>7</u>) and indometacin against itching from atopic dermatitis

Drug to be used	Degree of itching (Maximum "+++" to none "-")					
	Before application	5 minutes after application	10 minutes after application	3 hours after application		
Compound <u>7</u> solution	+++	-	-	-		
Indometacin	+++	+++	+	±		
cream						

•••

Example 12

ddY male mice, which were purchased at the age of 4 weeks from Japan SLC, were used at the age of 5 weeks after preliminary breeding. ... Either the investigational drug or solvent was administered subcutaneously to the rostral back of those mice and 50 $\mu$ L of Compound 48/80 (100 $\mu$ g/site) dissolved with saline was administered intracutaneously to the epilated part 30 minutes after the first administration. Subsequently, the mice were placed immediately in an observation cage (10 × 7 × 16cm) and their behavior was filmed with a video camera under an unattended environment for the subsequent 30 minutes. The

video was later played back to count the number of times that the mice scratched their body sites close to those where Compound 48/80 was administered with their back legs. The experiment was conducted using 8 to 10 mice per group.

The inhibition rate of scratching by each investigational compound was calculated by the following formula. The action to reduce scratching was used as an index of the antipruritic effect of the investigational compound.

Inhibition rate of scratching (%) =  $\{1 - (A-C/B-C)\} \times 100$ 

A = Mean number of scratches in investigational drug treatment group

B = Mean number of scratches in the group to which a solvent is administered instead of the investigational drug

C = Mean number of scratches in the group to which a solvent is administered instead of a pruritogenic agent

•••































Results are compiled in Table 6. The compounds used in the testing showed antipruritic effects with the dosage used.

Investigational drug	Dosage (mg/kg)	Inhibition rate (%)	
Compound <u>2</u>	1.0	41	
Compound <u>3</u>	0.0057	64	
Compound <u>5</u>	0.016	55	
Compound <u>6</u>	0.005	45	
Compound <u>7</u>	0.005	58	
Compound <u>8</u>	0.01	72	
Compound <u>9</u>	1.8	52	
Compound <u>10</u>	0.46	14	
Compound <u>11</u>	0.0018	45	
Compound <u>12</u>	0.07	39	
Compound <u>13</u>	0.07	47	
Compound <u>14</u>	0.31	46	
Compound <u>15</u>	1.88	56	
Compound <u>16</u>	0.0046	14	
Compound <u>17</u>	0.0066	90	
Compound <u>18</u>	0.03	92	
Compound <u>19</u>	0.03	40	
Compound <u>20</u>	0.006	62	
Compound <u>21</u>	0.0003	23	
Compound <u>22</u>	1.2	70	
Compound <u>23</u>	0.0069	46	

Table 6 Antipruritic effect of each type of opioid k agonist

" (lines 18 on page 58 through line 27 on page 63)

F. Industrial availability

"The antipruritic agent in the Invention is characterized as having opioid  $\kappa$  receptor agonist as its active component and is useful in the treatment of various kinds of skin diseases accompanied by itching, such as atopic dermatitis, neurological dermatitis, contact dermatitis, seborrheic dermatitis, autosensitization dermatitis, caterpillar dermatitis, asteatosis, senile pruritus, insect bites, photosensitivity, urticaria, prurigo, blisters, impetigo, eczema, tinea, lichen, psoriasis, scabies, acne vulgaris, etc. and visceral conditions accompanied by pruritus, such as malignant tumors, diabetes, liver diseases, renal failures, renal dialysis, pregnancy, etc." (lines 29 through line 34 on page 63).

(2) According to the description in (1) above, the Invention is found to be as follows.

A. For treatment of itching (pruritus) caused by skin diseases, internal medicine diseases, pregnancy, etc., antihistamines, anti-allergic agents, and other internal agents and

antihistamines, topical corticosteroids, nonsteroidal anti-inflammatory drugs, and other topical agents are used. In cases of internal agents, the time required for the onset of action, depressant action on the central nervous system, and other side effects become problems. In cases of topical agents, insufficient antipruritic effects and side effects due to long-term use of topical steroids become problems (background art).

In addition, concerning opioids and itching, it was considered that opioid agonists have the action to cause itching and, on the other hand, their antagonists have an antipruritic action. However, application of opioid antagonists as an antipruritic agent has not been realized (background art).

B. Intrinsic opioid peptides that selectively stimulate an opioid receptor were found for opioid receptors, which have three kinds,  $\mu$ ,  $\delta$ , and  $\kappa$ . Actions against itching of opioid  $\kappa$  receptor agonist (hereinafter referred to as " $\kappa$  agonist"), including dynorphin that was identified as  $\kappa$  receptor operated intrinsic opioid peptide, had not been discovered at all. The Invention made it clear for the first time that  $\kappa$  agonist has an antipruritic action (best mode for working the invention).

The Invention aims to provide a  $\kappa$  agonist with extremely rapid and strong antipruritic action and an antipruritic agent containing the former and is related to an antipruritic agent helpful for the treatment of itching in atopic dermatitis and other skin diseases, malignant tumors and other internal medicine diseases, and in pregnancy, etc., for which the active component is an opioid  $\kappa$  receptor operated compound (hereinafter referred to as " $\kappa$ -operated compound"), containing Compound 7 (the compound used in Example 9; it corresponds to nalfurafine hydrochloride) that is expressed in the following formula (however, there is a dispute as to whether an antipruritic agent whose active component is acid addition salt of the compound expressed in General Formula (I) belongs to the technical scope of the Invention or not, as indicated in No. 3 above) (objective of the invention, best mode for working the invention, examples, industrial availability).



C. Compound 7 that is a selective  $\kappa$ -operated compound has an antipruritic action superior to indometacin cream in patients with atopic dermatitis (Example 10). In an animal experiment where Compound 48/80, which is a stimulant that causes itching, was administered intracutaneously to mice, various kinds of  $\kappa$ -operated compounds, including Compound 7, showed an antipruritic action (Example 12).

2. Grounds for rescission 1 (incorrect fact-finding concerning the active component of the Drug)

(1) Factual situation

According to the evidence and the entire import of oral arguments, the following facts are found.

A. Statements in the Certificate of Approval (Exhibits Ko 4, 96, and 148)



#### List of Reference Materials and Related Substances

(omitted)

(B) The application for Approval was filed as "a pharmaceutical related to addition of dosage form" of the Capsule Preparation that had already been approved. When filing the application,

## 

#### B. Statements in the Package Insert (Exhibit Ko 5)

There is the following statement in the Package Insert that was created by the Plaintiff based on Article 52, paragraph (1) of the Pharmaceuticals and Medical Devices Act. (A) In the column for "Active Component/Content (per tablet)" in the [COMPOSITION AND PRODUCT DESCRIPTION], "Nalfurafine hydrochloride 2.5µg (2.32µg as nalfurafine)" is entered.

(B) In the column for [PHARMACOKINETICS], transition of blood concentration and pharmacokinetic parameters of nalfurafine in cases where nalfurafine hydrochloride was administered orally or intravenously are shown.

In addition, in the Package Insert, it is not clearly stated that the aforementioned transition of blood concentration, etc. was the measurement results of nalfurafine; however, in Exhibit Ko 164 (OHTA Shunsaku, Yakuhinseizougaku (Synthetic and Medicinal Chemistry), San'ei Shuppan, pp. 234 to 244, 1990), it is stated that "concerning a salified drug, it is no longer a salt in vivo after dose or administration and a free base will be separated." As mentioned later, nalfurafine hydrochloride separates into nalfurafine and chloride ion in the human body in the same way. Therefore, the aforementioned transition of blood concentration, etc. obtained by oral or intravenous administration of nalfurafine hydrochloride is found to be obtained by measuring nalfurafine.

(C) As "1. Action on pruritus" in [PHARMACOLOGY], the following is stated: "It inhibited acts of scratching of mice to which histamine, for which an antihistaminic: an existing antipruritic agent, is effective, was administered intracutaneously to induce itching and acts of scratching of mice to which substance P, for which an antihistaminic displays difficulty in being effective, was administered intracutaneously to induce itching. In addition, it inhibited acts of scratching of mice to which morphine, a central nervous system itching model for which an antihistaminic is ineffective, was administered intracutated intracutated intracutated intracutated intracutated intracities of the invito receptor binding testing and receptor operation testing conducted by using human opioid receptor expressing cells, it is indicated to be a selective opioid  $\kappa$  receptor agonist."

#### (D) [PHYSICOCHEMICAL PROPERTIES OF ACTIVE COMPONENT]

Nonproprietary name: Nalfurafine Hydrochloride

Chemical name: (2E) -N- [(5R,6R) -17-(Cyclopropylmethyl) -4,5-epoxy-3,14dihydroxymorphinan-6-yl] -3- (furan-3-yl) -N-methylprop-2-enamide monohydrochloride

Molecular formula: C<sub>28</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>·HC1 Structural formula:



Description: White to very light-yellow powder; High hygroscopicity and slightly unstable to light.

Concerning solubility, it is soluble in water and methanol, slightly soluble in ethanol (95), and practically insoluble in acetic ether and diethyl ether.

C. Statements in the Interview Form (Exhibit Ko 134)

(A) An interview form refers to "academic material for which the Japanese Society of Hospital Pharmacists established guidelines for descriptions and requested that the pharmaceutical manufacturer of the pharmaceutical in question create and provide for pharmacists, etc., as comprehensive instructions on individual drugs supplemented by information on package inserts etc., which compiles information necessary for the daily operations of healthcare professionals, such as pharmacists, etc., and for pharmaceutical quality control, information on prescription design, information on preparation, information on the proper use of pharmaceuticals, information on pharmaceutical patient care and other information" (Exhibit Ko 134).

(B) The Interview Form is made for Remitch OD Tablets 2.5µg, the Drug, and Remitch Capsules 2.5µg, the Capsule Preparation, and contains the following statements.

a. In "II. Matters Related to Name," "(1) Japanese Name (nomenclature) ナルフラフィ ン塩酸塩 (JAN)" and "(2) International Name (nomenclature)): Nalfurafine Hydrochloride (JAN), nalfurafine (INN)" are entered as "2. Nonproprietary name" of the Drug and Capsule Preparation.

b. As "III. Matters Related to Active Component," the same information as that in "Description" (B. (D) above) in the Package Insert is entered.

c. As "IV. Matters Related to Preparation," the following is entered: "2. Composition of Preparation (1) Content of active component (active ingredient): Capsule: Containing 2.5µg of nalfurafine hydrochloride (2.32µg as nalfurafine)/capsule; OD tablet: Containing 2.5µg of nalfurafine hydrochloride (2.32µg as nalfurafine)/tablet."

d. As "VI. Matters Related to Pharmacology," the same information as that in

"PHARMACOLOGY" (B. (C) above) in the Package Insert is entered.

e. As "VII. Matters Related to Pharmacokinetic," the same information as that in "PHARACOKINETICS" (B. (B) above) in the Package Insert is entered. In addition, the transition of plasma levels, etc. is found to be obtained by measurement of nalfurafine, in the same way as found in B. (B) above.

(C) Concerning pharmaceuticals, it is stated that Japanese names of drug substances in the Japanese Pharmacopoeia are named in reference to Japanese nonproprietary names of pharmaceuticals in Japan (JAN) and international nonproprietary names (INN), that a JAN is given to a pharmaceutical that is actually distributed in the form of hydrate or salt, and that an INN is given for the active part of a drug substance. It is also stated that a Japanese name of a pharmaceutical in cases where the pharmaceutical is inorganic acid salt or organic acid salt of amine is given as "○○○ \* \* \* 塩" (INN for ○○○ amine, \* \* \* refers to inorganic acid or organic acid) (Exhibits Ko 135 and 136).

In addition, WHO issued guidance for INN and international nonproprietary names are defined as those specifying the pharmaceutical substance or pharmaceutical active component (Exhibit Ko 136).

D. Regarding relationship between nalfurafine and nalfurafine hydrochloride

(A) Generally, concerning pharmaceutical development, pharmacology, physical properties, and safety are evaluated by using free bases in the early pharmaceutical exploration stage in principle. When optimization of the lead compound is complete and candidate compounds are narrowed down to a few compounds, screening of the drug substance form begins (Figure 2 below). In general terms, drug substance forms that have preferable physical properties and stability will be selected from multiple candidate forms found by screening and then subsequent preparation development is implemented.

Types of drug substance forms of small molecules that have been released or developed are classified as shown in Figure 1 below. Concerning the actually used drug substance forms, free bases or hydrates or salts were in the majority (Exhibit Ko 120 and the entire import of oral arguments).



Figure 1: Classification of Drug Substance Forms Used in Pharmaceuticals



Figure 2: Physical property and stability check items in exploration stage of pharmaceuticals

(B) It is common general technical knowledge in the pharmaceutical field that addition salt is formed by hydrochloric acid, etc. to increase the solubility and stability of basic compounds and that a free base separates from acid addition salt and is absorbed into mucosa in the form of a free base and shows drug efficacy and pharmacological action in vivo (Exhibits Ko 121 through 128 and 164 and the entire import of oral arguments).(C) Concerning basic compounds containing tertiary amine (tertiary nitrogen), such as a compound that has morphinan structure, such as nalfurafine of the Drug (morphinan)

compound), a compound that has a benzomorphan structure where part of the ring structure of the morphinan structure is removed (benzomorphan compound), a compound that has a phenylpiperidine structure (phenylpiperidine structure), etc., many basic compounds, for which water solubility is increased by forming acid addition salt using hydrochloric acid and stability is increased, were known (Exhibits Ko 166 through 183 and the entire import of oral arguments).

(D) Nalfurafine hydrochloride also separates into nalfurafine and chloride ion that are free bases in vivo immediately after administration to the human body. The nalfurafine is absorbed and reaches the central nervous system, which is an action site, binds to an opioid  $\kappa$  receptor, and shows drug efficacy and pharmacological action. The hydrochloric acid part of nalfurafine hydrochloride does not affect the existence of drug efficacy and pharmacological action and is added to improve the physical properties of the drug substance, such as solubility and stability. These facts were widely known to persons skilled in the art by the time when application for marketing approval of the Drug was filed on March 31, 2016, and examinations conducted for the marketing approval of the Drug was based on these facts (Exhibits Ko 129 and 130, Ko 151 [Written Opinion of B], and the entire import of oral arguments).

E. Circumstances with which how a person skilled in the art understands the term of "active component" can be presumed

There are statements in the following literature with which how a person skilled in the art understands the "active component" can be presumed.

(A) Yakkadaijiten Henshu Iinkai ed., "*Hirokawa Yakkagaku Daijiten Dai 5-han* (Hirokawa Pharmaceutical Science Dictionary, 5th edition)," Hirokawa Shoten Co., 2013 (Exhibit Ko 103):

"[Pharmaceutical's] active component: A substance that causes the intended action of a pharmaceutical by combining with the simple substance or one or more types of other components. In addition, it often refers to a component indicating drug efficacy among components, for example, a component of herbal medicine efficacy, and the separation of active components in herbal medicine is one of the ways to develop new drugs."

(B) SHIOJI Yusaku, "*Zoku Iyakuhin Kogyo to Funtaikogaku* (Sequent to Pharmaceutical Industry and Powder Engineering)," *Journal of the Society of Powder Technology*, Vol. 14, No. 7, p. 409, 1977 (Exhibit Ko 104)

"Efficacy of pharmaceuticals refers to therapeutic effects and therapeutic effects are usually evaluated by clinical testing results of pharmaceuticals; however, as a preliminary stage to clinical testing, it is necessary to measure how much the active component is used in vivo from the preparation. ... The use rate of the active component of a pharmaceutical in vivo is called bioavailability. It is measured by collecting blood and urine usually at specified intervals after drug administration and by examining the temporal development of content of the (absorbed, metabolized, or excreted) active component that exists in serum and urine, and is evaluated in relative comparison between the case where it is administered in the form that is absorbed the most (generally: solution) and other dosage forms by using various parameters."

(C) ISHIZAKI Takashi, et al., "3. Shinyaku no Kaihatsu to Rinshoyakuri (3. New Drug Development and Clinical Pharmacology)," *Pharmacia Review*, No. 1, p. 39, 1978 (Exhibit Ko 105):

"According to the definition of the US FDA, 'Biological availability refers to the speed and amount that a drug component with activity or a therapeutic active component is absorbed from drug preparation and used at the drug action site.' In concrete terms, it is specified to measure the blood concentration, excretion in urine, or pharmacological efficacy of the active component. ..."

(D) OGATA Hiroyasu, "Senpatsuiyakuhin to Rinshojo no Yukosei/Anzensei ga 'Doto' dearu Generic Iyakuhin no Hyoka - Seibutsugakuteki Doutousei wo Kangaeru - (Evaluation of Generics whose Clinical Efficacy and Safety are 'Identical' to Brand Name Drugs -Consideration of Biological Equivalence-)," *Kohatsu Iyakuhin Hinshitsu Joho* (Generic Drug Quality Information), No. 2, pp. 3 to 4, 2014 (Exhibit Ko 111):

"The active component contained in a preparation needs to be released or dissolved from the preparation after administration. For this reason, if the release speed and dissolution speed in vitro are compared and examined, blood concentration and concentration in the action expression site of the active component after administration of the preparations can be estimated, and in some aspects, they are expected to be a substitute for human study."

(E) INOUE Katsuhisa, "Iyakuhin no Kyushukiko no Kaimei to Sono Kyushusei Kaizen/Yosoku eno Oyo wo Mezashite (Aiming to Resolve the Absorption Mechanism of Pharmaceuticals and Achieve Its Practical Application to Improve and Predict Absorptivity)," *Tokyo University of Pharmacy and Life Sciences*, No. 124, p. 5, 2016 (Exhibit Ko 112):

"If an oral medicine is administered as specified, all of the active components are absorbed in the intestine and circulate throughout the whole body."

(F) There is a statement to the effect that what is taken into blood in the human body is the "active component" in SAKUMA Akira, "*Kusuri no Koka/Gyakukoka Rinsho Yakurigaku Nyumon* (Effects and Adverse Effects of Drugs: Introduction of Clinical Pharmacology)," Kodansha Ltd., p. 21, 1981 (Exhibit Ko 106), TOHSE Noritsugu,

"Yokuwakaru Yakurigaku no Kihon to Shikumi (Easy-to-Understand Pharmacology Basics and Structure)," SHUWA SYSTEM CO., LTD., p. 43, 2008 (Exhibit Ko 109), and KAGAWA Yoshiyuki, "Nomikata Mamotte Koka Hakki (Observe How to Take Drugs and Show Effects)," *Shizuoka Shimbun, evening paper*, p. 5, 2013 (Exhibit Ko 110). F. Statements in various literatures referring to pharmaceuticals containing nalfurafine hydrochloride

In various literatures referring to the Drug and Capsule Preparation containing nalfurafine hydrochloride, there are cases where nalfurafine hydrochloride and nalfurafine are not always distinguished, such as "nalfurafine that is an active component" (Exhibit Ko 137; [NARUKAWA Mamoru, "Kakushinteki Iyakuhin Sinsa no Pointo (Innovative Drugs: Key Points for Examination)," Nikkei Business Publications, Inc., pp. 338 to 341, 2015]); "Nalfurafine 2.5µg," "nalfurafine 5µg," "nalfurafine 10µg" (Exhibit Ko 138; [KUMAGAI Hiroo, et al., "Atarashii Kayumi Chiryoyaku Nalfurafine (Remitch) no Rinsho Kaihatsu to Yukosei (Clinical Development and Efficacy of a New Therapeutic Drug for Itching, Nalfurafine [Remitch])," Tosekiryoho Next XII, pp. 94 to 108, 2011]; Exhibit Ko 139 [KUMAGAI Hiroo, et al., "Ketsueki Toseki Kanja no Kayumi no Byotaiseiri to Nalfurafine no Rinsho Koka (Pathophysiology of Itching in Patients under Hemodialysis and Clinical Effects of Nalfurafine)," Japan Medical Journal, No. 4538, pp. 72 to 80, 2011]; Exhibit Ko 140 [KUMAGAI Hiroo, et al., "Ketsueki Toseki Kanja no Kayumi no Byotai to Nalfurafine no Koka (Pathology of Itching in Patients under Hemodialysis and Effects of Nalfurafine)," Modern Physician, Vol. 32, No. 4, pp. 442 to 445, 2012]; Exhibit Ko 141 [FUKAGAWA Masafumi, et al., "EBM Tosekiryoho (EBM Dialysis Therapy)," Chugai-Igakusha, p. 232, 2010]); "Remitch OD Tablets 2.5µg, Component (...) Nalfurafine (2.5µg/tablet)" (Exhibit Ko 146; [Odate Municipal General Hospital, Pharmaceutical Department, "Yakkyoku News (Pharmaceutical Department News)," Vol. 28, No. 4, 2017]), etc.

G. Treatment of "active component" in the pharmaceutical affairs administration

(A) "Chikujo Kaisetsu Yakujiho (Commentary by Article, Pharmaceutical Affairs Act)," which was compiled by the Pharmaceutical Affairs Bureau of the Ministry of Health and Welfare (Gyosei Corporation, 1983), states as follows concerning the interpretation of "active component" as referred to in Article 50, item (vii) of the Pharmaceutical Affairs Act prior to the amendment by Act No. 69 of 2006 (Article 50, item (x) of the Pharmaceuticals and Medical Devices Act): "'Active component' refers to an effective ingredient that pharmacologically causes the efficacy and effects that are the objectives of pharmaceuticals. Therefore, fillers, stabilizers, solvents, and other supplements for preparations that have no direct relationship with efficacy and effects are not included"

(Exhibit Ko 149).

(B) There are the following statements in the "Guidelines for Design and Evaluation of Controlled-Release Preparations (oral administration preparation)" (Notice No. 5 of the FERD), a guideline for design and evaluation of controlled-release preparations (oral administration preparations) that are conducted for the purpose of application for approval, which the Directors of the First Evaluation and Registration Division and the Biologics and Antibiotics Division, Pharmaceutical Affairs Bureau, Ministry of Health and Welfare issued to the directors of the competent departments (bureaus) of hygiene in each prefecture as of March 11, 1988 (Exhibit Ko 114).

"Controlled release of pharmaceuticals has a major role in maintaining the blood concentration of the active component at an appropriate level. Therefore, it is preferable to examine the relationship between blood concentration and drug efficacy of the active component, including drugs or active metabolites, and to define the average minimum effective concentration, optimal therapeutic concentration, etc."

"Pharmacokinetic property of the preparation shall be evaluated for healthy subjects by comparisons with quick-release preparations or drug substances, in principle. Pharmacokinetic evaluation shall be implemented based on blood data, in principle, excluding cases where the concentration of active components can be measured at the action site and where the effective concentration is already known. Bodily fluid data other than blood, such as urine, saliva, etc., can be used in cases where a relationship between concentration at the action site or blood concentration of the active components and their concentration in bodily fluids is found."

#### H. Written opinions of experts

Professor emeritus B, professor C of the Department of Pharmaceutical Sciences, Kobe Gakuin University, and professor D of Kumamoto University, School of Pharmacy, state in the written opinions of expert examination (Exhibits Ko 129, 130, and 151) that concerning the Drug or Capsule Preparation, nalfurafine that is free base is an "active component."

Professor emeritus B states in Written Opinion of B (Exhibit Ko 151) that "It has been common general technical knowledge since 1974 until today that the 'active component' in pharmaceuticals refers to a chemical substance that is absorbed from gastrointestinal tracts, transferred to circulating blood, bound with a receptor and other proteins, and thereby fulfills its pharmacological action."

I. Developments concerning the filing the Application for Registration of Patent Term Extension

(A) The Plaintiff entered in [i] the application form of the Application for Registration of

Patent Term Extension (Exhibit Ko 1) "Brand name: Remitch OD Tablets 2.5µg, Active component: Nalfurafine hydrochloride" as "(3) Pharmaceuticals subject to the disposition" under "6. Details of disposition specified by Cabinet Order as set forth in Article 67, paragraph (2) of the Patent Act" and entered in [ii] "Materials indicating grounds for the extension" as attached to the application form as follows as "[ii] Pharmaceuticals subject to the disposition" under "(2) Matters for which the disposition specified by Cabinet Order has been received."

"Brand name: Remitch OD Tablets 2.5µg Active component: Nalfurafine hydrochloride Structural formula

"



In addition, the Plaintiff explained in [iii] "Materials indicating grounds for the extension" above that "Nalfurafine hydrochloride is an active component of Remitch OD tablets 2.5µg."

(B) Later, on February 10, 2020, in the Appeal, the Plaintiff amended the entries in the "active component" in (A) [i] and [ii] above, respectively, concerning (A) [i] through [iii] above, to "Nalfurafine hydrochloride (nonproprietary name INN: nalfurafine) (the active component is indicated as nalfurafine hydrochloride  $2.5\mu g$  ( $2.3\mu g$  as nalfurafine) under [COMPOSITION AND PRODUCT DESCRIPTION] of the package insert of Remitch OD Tablets  $2.5\mu g$  (Reference 4 of materials indicating the grounds for the extension)" and the Plaintiff explained that "The active component of Remitch OD Tablets  $2.5\mu g$  is nalfurafine hydrochloride" (Exhibits Ko 93 and 94). (2) Review

Based on the facts that are found in (1) above, whether it is necessary to receive the Disposition for working the Invention or not is examined.

A. The purpose of the system for registration of patent term extension is to allow the patentee to reclaim a period of time during which the patentee has been unable to work the patented invention because of the necessity to receive a Cabinet Order disposition. Therefore, whether it was necessary to receive the Disposition in order to work the Invention should be determined in light of the reasons for which the Patent Act institutes such system for extending a patent term, and in this process, the content of the Disposition should be determined substantially from such perspective and should not be determined formally only on the basis of what is described as to the "active components" in the Certificate of Approval. This view can be understood as conforming to the purport of the judgment of the Third Petty Bench of the Supreme Court, 2014 (Gyo-Hi) 356, rendered on November 17, 2015, Minshu Vol. 69, No. 7, at 1912.

B. According to the fact found in (1) D. above, the following are found to have been widely known to persons skilled in the art by March 31, 2016, when the application for marketing approval of the Drug was filed: concerning pharmaceuticals, there are cases where an acid, etc. is added to a free base from the perspectives of good physical property and stability and a compound (addition salt) that is different from the free base is determined to be a pharmaceutical; if such pharmaceutical is taken into the human body, the free base separates from the addition salt and the free base shows drug efficacy and pharmacological action; nalfurafine and nalfurafine hydrochloride are in the same relationship; and there are no differences in drug efficacy and pharmacological actions between nalfurafine and nalfurafine hydrochloride.

C. Considering what is indicated in B. above, the facts found in (1), E., F., and G. above, and the details of the written opinions of experts in (1) H. above, it is found that a person skilled in the art in the pharmaceutical field may consider not only an addition salt that is mixed in a pharmaceutical, but also a free base as an "active component" by focusing on the action causing the efficacy and effects that are the objectives of the pharmaceutical.

D. As mentioned in (1) A. through C. above, "nalfurafine hydrochloride" is indicated as "active component" in the Certificate of Approval. "Nalfurafine hydrochloride" is indicated as "Physicochemical properties of the active component" also in the Package Insert and its structural formula and product description are also described. It is construed that this is a description based on the fact that the drug substance (addition salt) actually mixed in the pharmaceutical is considered to be an active component from the perspective of distinguishing it from fillers and other supplements for the preparation. On the contrary, in the column for "Active Component/Content (per tablet)" in the Package Insert, "Nalfurafine hydrochloride 2.5µg (2.32µg as nalfurafine)" is entered. In the Interview Form, the Japanese name is indicated as " $\pm \nu \tau \overline{2777} \times \pm \overline{277775777}$ 

hydrochloride)"; however, both "nalfurafine hydrochloride" and "nalfurafine" are indicated as the International name, and "Capsule: Containing 2.5µg of nalfurafine hydrochloride (2.32µg as nalfurafine)/capsule; OD tablet: Containing 2.5µg of nalfurafine hydrochloride (2.32µg as nalfurafine)/tablet" is entered as "Content of active component (active ingredient)." And as mentioned in (1) A. above, in the Certificate of Approval,  $\bullet$ 

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as mentioned in (1) B. and C. above, in the Package Insert and the Interview Form, the plasma concentration and pharmacokinetic parameters of "pharmacokinetic" of the Drug are those obtained by measuring nalfurafine, not nalfurafine hydrochloride.

E. Taking into account the above, it is inappropriate to determine formally that the active component of the Drug subject to the Disposition is "nalfurafine hydrochloride," which was described in the Certificate of Approval. Rather, it is appropriate to find that the Drug substantially has, as its active component, both "nalfurafine," which is a free base that attracted attention in the examination for approval of the Drug as a component having efficacy and effects, and "nalfurafine hydrochloride," which is its active ingredient mixed in the Drug.

Consequently, there is an error in the JPO Decision in which the JPO considered "nalfurafine hydrochloride" to be the sole active component of the Drug and denied "nalfurafine" as an active component of the Drug, and finally determined that it cannot be said that it was necessary to receive the Disposition in order to work the Invention. Therefore, the grounds for rescission 1 are well-founded.

#### (3) Allegation of the Defendant

The Defendant alleged that the Plaintiff alleged the "active component" of the Drug to be "nalfurafine hydrochloride" when filing the Application for Registration of Patent Term Extension and that the Plaintiff indicated the active component as nalfurafine hydrochloride in the documents (Exhibits Ko 83, 88, and 90) created by the Plaintiff.

However, the developments concerning the filing of the Application for Registration of Patent Term Extension are as found in (1) I. above. In light of these developments, there are no grounds to hinder the Plaintiff from alleging the grounds for rescission 1 and the court from determining that the grounds for rescission 1 are well-founded, and these developments do not affect the determination in (2) above. In addition, the documents alleged by the Defendant (Exhibits Ko 83, 88, and 90) are documents created for filing an application for marketing approval of the Drug. In consideration of the developments and details of the examination for approval of the Drug, it is appropriate to construe that the active component of the Drug substantially refers to both nalfurafine hydrochloride and nalfurafine. Therefore, the statements in the Certificate of Approval (Exhibits Ko 4, 96, and 148) do not also affect the determination in (2) above. In the same way, the aforementioned documents do not affect the determination in (2) above.

No. 5 Conclusion

Consequently, the grounds for rescission 1 are well-founded and the JPO Decision is illegal, which affects its conclusion, without needing to make a determination concerning the remaining points. Therefore, the claim of the Plaintiff is upheld and the judgment is rendered as indicated in the main text.

Intellectual Property High Court, Second Division Presiding judge: MORI Yoshiyuki Judge: MANABE Mihoko Judge: KUMAGAI Daisuke