IP HIGH COURT DECISIONS

2025

International IP Law Research Center
of IP High Court of Korea

IP HIGH COURT DECISIONS

Copyright ⓒ 2026 by
International IP Law Research Center of IP High Court of Korea
Printed in Seoul
The Republic of Korea

All rights are reserved. No part of this book may be reproduced in any form, except for the brief quotations for a review, without written permission of the International IP Law Research Center of IP High Court of Korea.

Homepage "http://patent.scourt.go.kr/IP/Main.work"

Court Publications Registration Number
32-9740146-002008-10

FOREWORD

The intellectual property landscape is changing rapidly. Advanced technologies, including artificial intelligence, biotechnology, semiconductors, and digital platforms, are reshaping industry and everyday life. Against this backdrop, how best to protect and utilize the fruits of creativity and invention has become an important challenge that our society must address together. Intellectual property rights now serve a purpose that extends beyond encouraging innovation. They provide an essential legal foundation for balancing technological progress, fair competition, and industrial growth.

These changes are also reflected in the nature of intellectual property disputes. The technologies at issue are becoming increasingly sophisticated, while questions concerning the boundaries and scope of protection of intellectual property rights are growing ever more complex. Courts must look beyond the resolution of individual cases to develop an accurate understanding of changes in technology and markets. They are thus called upon to articulate sound legal principles that respond to the demands of our time.

The IP High Court of Korea continues to enhance transparency, expertise, and predictability in adjudication. As part of these efforts, in July 2025, the Court comprehensively revised its existing procedural guidelines and introduced the *Rules of Practice in the IP High Court of Korea*, governing civil appellate trials and actions to revoke IPTAB decisions and serving a function comparable to that of *Patent Local Rules* in the United States.

To further strengthen its expertise and international capacity in intellectual property matters, the Court signed a memorandum of understanding with the World Intellectual Property Organization (WIPO)

in August 2026 on alternative dispute resolution in the field of intellectual property. In September 2026, the Court also held a bilateral meeting with the Chief Justice of Mongolia, during which both sides agreed to deepen their understanding of each other's judicial systems and continue to strengthen judicial cooperation.

2025 IP High Court Decisions is a collection of English translations of twelve selected judgments issued by the IP High Court in 2025. The judgments address core issues in intellectual property litigation, including the inventive step of patented inventions, the interpretation of the scope of rights and the determination of infringement, the assessment of damages for patent infringement, trademark distinctiveness and similarity, and design similarity. Each judgment illustrates how legal principles are applied to the specific facts and arguments presented by the parties. This volume will help bring the Court's practical standards for resolving intellectual property disputes to a wider international audience.

Drawing on the experience and expertise it has accumulated as a specialized intellectual property court, the IP High Court will continue to ensure fair and trustworthy adjudication and expand its engagement with the international community. I extend my sincere gratitude to the researchers of the International IP Law Research Center and all others who contributed to the publication of this volume.

October 2026

HAN Kyu-hyun
Chief General of the Int'l IP Law Research Center
Chief Judge of the IP High Court of Korea

TABLE OF CONTENTS

1. **[Patent] 2022Na1456, decided February 13, 2025 (Variable Displacement Swash Plate Compressor Case)** ····· **1**

2. **[Damages] 2023Na11078, decided May 28, 2025 (Mobile Phone Skin Case)** ····· **40**

3. **[Patent] 2023Heo13599, decided January 16, 2025 (Tube Aligning Apparatus for Manufacturing Blood Collection Tubes Case)** ····· **78**

4. **[Employee Invention] 2024Na10157, decided July 24, 2025 (Patent Pool and Cross-License Agreements Compensation Claim Case)** ····· **107**

5. **[Damages] 2024Na10249, decided January 23, 2025 (Smart Owl Case)** ····· **143**

6. **[Trademark] 2024Heo11507, decided October 17, 2024 (Simpleat Case)** ····· **153**

7. **[Trademark] 2024Heo12388, decided February 14, 2025 (Bear-Shaped Jelly Case)** ····· **165**

8. **[Patent] 2024Heo12685, decided April 10, 2025 (Detachable Automatic Rotating Door for a Showcase Case)** ····· **183**

9. **[Patent] 2024Heo13541, decided January 23, 2025 (Tegoprazan Case)** ····· **206**

10. **[Design] 2024Heo13978, decided April 10, 2025 (Women's One-Piece Dress Case)** ····· **241**

11. [Design] 2024Heo16021, decided July 24, 2025 (Amazon Website Case) ····· 260

12. [Trademark] 2025Heo10296, decided October 30, 2025 (Cocina Case) ····· 271

GLOSSARY

Korean	English
(특허심판원의 심결) 취소*	Revoke (v.); Revocation (n.)
(제1심 법원의 판결) 취소*	Reverse (v.); Reversal (n.)
청구취지	Demand for Relief
청구취지 및 항소취지 - 청구취지 - 항소취지	Demand for Relief Plaintiff's Demand Appellant's Demand
원출원	Original Patent Application
이 사건 심결의 경위, 관련 사건의 경과 등	Procedural History
준비서면	Brief
특허발명	Patented Invention
해결과제	Problem to be Solved
결합의 용이성	Ease of combination
청구범위(청구항) 해석	Claim Construction
이 사건 발명	Invention at Issue
확인대상발명	Challenged Invention
기술분야	Technical Field
배경기술	Background Art (Background of the Invention)
발명의 설명(발명의 상세한 설명)	(Detailed) Description of the Invention
기술사상의 핵심(핵심적 기술사상)	Core of the Inventive Concept

* When translating "취소," "revoke" is used for actions to revoke IPTAB decisions and "reverse" is used for civil appellate cases. This distinction reflects the difference between the two procedures: the court revokes an IPTAB decision without replacing it with its own, whereas in a civil appeal, it reverses the first-instance judgment, replacing it with its own.

IP HIGH COURT OF KOREA
TWENTY-THIRD DIVISION
DECISION

Case No.	2022Na1456 Injunction, etc.
Plaintiff, Appellant	Hanon Systems Co., Ltd. Co-Representative Executive Officers A, a German national, and B, an Indian national Counsel for Plaintiff Attorneys Deoksun JANG, Cheonwoo SON, Suhun LEE
Defendant, Appellee	Doowon Climate Control Co., Ltd. Representative Director C Counsel for Defendant Lee & Ko Attorneys in Charge Heon LEE, Hongsun KIM, Seungeun YOO
District Court's Decision	Seoul Central District Court Decision 2019GaHap566500, decided May 20, 2022
Date of Closing Argument	December 10, 2024
Decision Date	February 13, 2025

ORDER

1. The Plaintiff's appeal is dismissed.

2. Costs of the appeal shall be borne by the Plaintiff.

DEMAND FOR RELIEF

The judgment of the first instance shall be reversed. The Defendant shall pay to the Plaintiff KRW 30,000,000,000, together with the

amounts calculated at the rate of 12% per annum on KRW 500,000,000 thereof from the day following the date of service of a copy of the complaint in this case, and on KRW 29,500,000,000 from the day following the date of service of a copy of the application dated January 7, 2022 to amend the demand for relief and the cause of action, in each case until full payment.

OPINION

1. Basic Facts

A. The Plaintiff's Patented Invention at Issue (Plaintiff's Exhibit No. 1; Defendant's Exhibit No. 23)

1) Title of Invention: Variable displacement swash plate compressor

2) Filing Date of Application / Registration Date / Registration Number: June 5, 2001 / November 19, 2007 / No. 10-0779067

3) Claims (reflecting the correction request dated May 8, 2020; the underlined portions are the corrected portions)

[Claim 1] A variable displacement swash plate compressor, characterized by comprising: front and rear housing portions and a cylinder block coupled therebetween; a rotating shaft extending inward from the front housing portion (hereinafter "**Element 1**"); a plurality of bearing members rotatably supporting the rotating shaft (hereinafter "**Element 2**"); a rotating body coupled to the rotating shaft so as to rotate together therewith; a swash plate slidably coupled to the rotating body and having an inclination angle that varies according to the cooling load (hereinafter "**Element 3**"); a sealing portion installed on the outer circumferential surface of the rotating shaft to prevent leakage of pressure from the housing portion (hereinafter "**Element 4**"); and oil supply means having a first oil supply passage consisting of at least one hole formed from the inner wall of the front housing portion to

the front part of the front housing portion, at a position corresponding to the bearing members and the sealing portion, so as to enable oil to be supplied toward the bearing members and the sealing portion (hereinafter "**Element 5**"), a plurality of second oil supply passages formed so as to enable oil to flow through the inner wall of the front housing portion (hereinafter "**Element 6**"), and a third oil supply passage placing the first oil supply passage and the second oil supply passages in communication with one another (hereinafter "**Element 7**"); wherein the rotating body has formed in its front face a rotating body oil supply passage consisting of at least one through hole so as to enable oil to be supplied to the bearing members (hereinafter "**Element 8**"); the second oil supply passages are formed as a plurality of radial grooves in the inner wall of the front housing portion so that oil flows from the crank chamber (hereinafter "**Element 9**"); and the third oil supply passage is formed in the inner wall of the front housing portion in the shape of a circular groove about the rotating shaft, so that oil that has flowed into the third oil supply passage through the second oil supply passages can be supplied to the first oil supply passage (hereinafter "**Element 10**") (hereinafter "**Claim 1 at Issue**").

[Claims 2 and 7] Deleted

[Claims 3 and 4] Deleted

[Claims 5 and 6] Text omitted

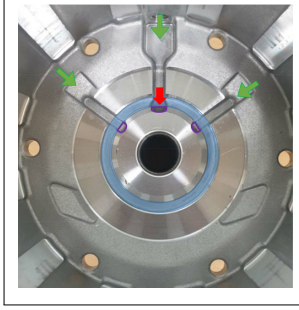
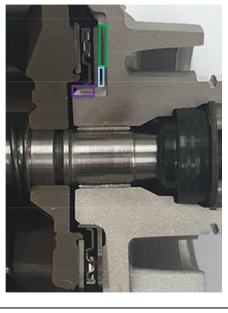
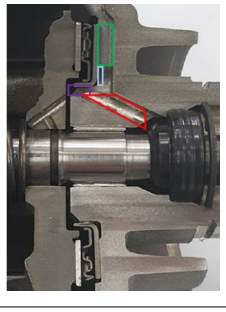
4) Principal Contents of the Description of the Invention and Drawings

As set forth in [Appendix 1] (contents omitted).

B. The Defendant's Products (Plaintiff's Exhibits Nos. 2 through 5)

1) The Defendant manufactures and sells the compressors listed in Appendix 2 (collectively, the "**Defendant's Products**").

2) The inner wall of the housing portion of all of the Defendant's Products has the following oil supply passages through which oil can flow. At the 12 o'clock position there is one first oil supply passage formed in the shape of a hole that supplies oil to the sealing portion (see red)[1]; at the 10 o'clock, 12 o'clock, and 2 o'clock positions there are three radially formed second oil supply passages (see green), of which the second oil supply passage at the 12 o'clock position is directly connected to the first oil supply passage; there is a circular groove formed about the rotating shaft in communication with each of the first and second oil supply passages (see blue; hereinafter "**Groove at Issue**"); and around the rotating shaft, at the 10 o'clock, 12 o'clock, and 2 o'clock positions, three semicircular flow passages communicating with the second oil supply passages are formed (see purple; hereinafter "**axial flow passages**").

Front view (Plaintiff's Exhibit No. 4)	**Sectional view at the 2 o'clock (10 o'clock) position (Defendant's Exhibit No. 68)**	**Sectional view at the 12 o'clock position (Defendant's Exhibit No. 67)**
		

1) There is no particular dispute between the parties that the Defendant's Products include elements identical in shape and function to the first and second oil supply passages of Claim 1 at Issue. Accordingly, the elements of the Defendant's Products corresponding to the first and second oil supply passages of Claim 1 at Issue are likewise referred to as the first and second oil supply passages.

C. Related Invalidation Action

1) On January 8, 2020, the Defendant filed with the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB"), against the Plaintiff, a petition for invalidation of the patent with respect to the Patented Invention at Issue. On May 8, 2020, in those trial proceedings, the Plaintiff made a correction request (hereinafter "**Correction Request at Issue**") whose principal content was to delete Claims 3 and 4 at Issue and to add to Claim 1 at Issue the language "so that oil that has flowed into the third oil supply passage through the second oil supply passages can be supplied to the first oil supply passage" (hereinafter "**Language at Issue**").

2) On June 18, 2020, the IPTAB rendered a decision accepting the Correction Request at Issue, dismissing on procedural grounds the part of the Defendant's petition relating to Claims 3 and 4 at Issue and dismissing on the merits the part relating to Claims 1, 5, and 6 at Issue, on the grounds that "① the Plaintiff's correction request is lawful; ② Claim 3 and Claim 4 at Issue were deleted by the Correction Request at Issue; and ③ the inventive step of Claim 1, Claim 5, and Claim 6 at Issue is not denied."

3) The Defendant brought before the IP High Court an action seeking revocation of that decision (hereinafter "**Related Invalidation Action**"); however, on October 15, 2021 the IP High Court rendered a judgment dismissing the Defendant's claim, on grounds including that "among the elements of Claim 1 at Issue, the elements other than the third oil supply passage were publicly known through the prior art or could readily be derived from a combination of the prior art; however, the third oil supply passage is not only a configuration that was not publicly known before the filing of the Patented Invention at Issue, but is also one that a person having ordinary skill in the art to which the invention pertains (hereinafter "**a person of ordinary skill in the art**") could not readily derive, so that the inventive step of Claim 1 at Issue

is not denied. In particular, although Prior Art 3[2] discloses a circular roughened surface similar to the third oil supply passage of Claim 1 at Issue, that roughened surface cannot be regarded, like the third oil supply passage of Claim 1 at Issue, as 'being in the shape of a circular groove placing the first oil supply passage and the second oil supply passages in communication with one another, causing oil that has flowed into the third oil supply passage through the second oil supply passages to be supplied to the first oil supply passage, temporarily storing oil during operation of the compressor, and having the function and operational effect of allowing lubrication to be carried out smoothly'" (Case No. 2020Heo5221). The Defendant appealed, but on March 17, 2022 the Supreme Court rendered a judgment dismissing the appeal without further review (Case No. 2021Hu11308), whereby the above judgment became final and conclusive.

[Factual basis] Undisputed facts; the statements in Plaintiff's Exhibits Nos. 1 through 6, 28 through 33, and 36 (including all branch numbers where such numbers exist; the same applies hereinafter) and in Defendant's Exhibit No. 23; the overall purport of the pleadings and oral arguments

2. Whether the Defendant's Products Fall Within the Scope of Rights of Claim 1 at Issue

A. The Parties' Arguments

1) The Plaintiff

A) The Defendant's Products have all of the elements of Claim 1 at Issue and therefore fall within its scope of rights.

---

2) This is the same as the swash plate compressor of model name "7SB16C" manufactured by Demso of Japan, which the Defendant submitted as Prior Art 5 (Defendant's Exhibit No. 5) in this action.

B) The Language at Issue in Element 10 of Claim 1 at Issue requires only that it be possible for oil that has flowed into the third oil supply passage through the second oil supply passages to be supplied to the first oil supply passage, and must not be construed as requiring that oil always be supplied in every case.

2) The Defendant

A) The Defendant's Products do not include Elements 7, 8, and 10 of Claim 1 at Issue and therefore do not fall within its scope of rights.

B) The Language at Issue in Element 10 of Claim 1 at Issue is a functional expression whose technical configuration must be determined, and the Defendant's Products cannot be regarded as having the technical configuration of Element 10 as determined by taking into account the description of the invention and the drawings of the Patented Invention at Issue.

B. Whether the Defendant's Products Have Element 10

1) Relevant Legal Principles

In determining the scope of rights of a patented invention, even where the meaning of a term stated in the claims is clear, if the specific content of the technical configuration cannot be ascertained from that term, the technical configuration expressed by that term must be determined by taking into account the description of the invention and the drawings, and the scope of rights of the patented invention determined accordingly (see Supreme Court Decision 2007Hu883, decided June 14, 2007, etc.). The same applies where the claims of a patent include specification of a product by function, effect, property, or the like, so that the specific content of the technical configuration cannot be ascertained from the wording alone; and furthermore, where construing the claims literally is manifestly unreasonable in light of the other statements in the specification, they must be construed reasonably

in accordance with justice and equity, taking into account the content of the filed technical concept, the other statements in the specification, and legal certainty for third parties (see Supreme Court Decision 2005Da77350, 77367, decided February 28, 2008, etc.).

2) Determination of the Technical Configuration of Element 10 as Stated in the Claims

Element 10 reads: "the third oil supply passage is formed in the inner wall of the front housing portion in the shape of a circular groove about the rotating shaft, so that oil that has flowed into the third oil supply passage through the second oil supply passages can be supplied to the first oil supply passage." The Groove at Issue in the Defendant's Products is "formed in the inner wall of the front housing portion in the shape of a circular groove about the rotating shaft" (there is no particular dispute between the parties on this point). Moreover, the portion of the Language at Issue reading "oil that has flowed into the third oil supply passage through the second oil supply passages ··· to the first oil supply passage" specifies the flow path of the oil (there is likewise no particular dispute between the parties on this point). Ultimately, the specifically disputed portion of Element 10 is the phrase "can be supplied" in the Language at Issue.

In this regard, since the Patented Invention at Issue does not separately define the meaning of the word "공급" ("supply") in its specification, that meaning can only be construed on the basis of the ordinary meaning of the word "supply"; and in light of the context of the claims, it is construed as meaning "supply (供給)." Since "supply (供給)" means, in dictionary terms, "providing goods and the like according to demand or need," the phrase in Element 10, "oil that has flowed into the third oil supply passage through the second oil supply passages can be supplied to the first oil supply passage," appears to mean approximately "oil that has flowed into the third oil supply passage through the second oil supply passages can be provided to the first oil supply passage according to the need of the first oil supply

passage.”

However, considering the technical field to which the Patented Invention at Issue belongs, the mere fact that the meaning of “can be supplied” in the above claim language can be understood as above does not mean that the specific content of the technical features of that claim language is thereby ascertained. In particular, since the claim language “can be supplied” constitutes a so-called “functional expression” seeking to specify a product by function, effect, or the like, its technical configuration is difficult to determine from the wording alone; it is therefore necessary to determine the technical configuration of the Language at Issue by taking into account the description of the invention, the drawings, and the like in the specification of the Patented Invention at Issue.

Examining this, for the following reasons, it is reasonable to find that the technical configuration of the Language at Issue, as determined by taking into account the description of the invention, the drawings, and the like in the specification of the Patented Invention at Issue, is “that the pressure of the oil is continuously maintained in the direction of the first oil supply passage along the flow path by which oil that has flowed into the third oil supply passage through the second oil supply passages is provided to the first oil supply passage.”

A) Conventional compressors formed a closed space between the front housing portion and the rotating body by means of a thrust bearing, and the rotating body was press-fitted onto the rotating shaft, so there was a problem that oil could not be sufficiently supplied to the sealing portion or the bearing members. In particular, in the case of a “variable displacement swash plate compressor,” a large load arises from the abrupt shift of the center of gravity as the swash plate rotates, and if wear of the sealing portion is severe due to the resulting wobbling of the rotating shaft, pressure leakage, oil leakage, and the like may occur so that the compressor cannot perform its function properly (paragraphs [0020]–[0026]). In order to solve such a

technical problem, the Patented Invention at Issue sought to improve the durability of the compressor by forming in the inner wall of the front housing portion a plurality of oil supply passages capable of supplying oil into the sealing portion by bypassing the closed space, and thereby enabling oil to be supplied to the bearing members and the sealing portion (paragraph [0027]).

B) Accordingly, the Patented Invention at Issue forms a first oil supply passage in the shape of a hole in the inner wall of the front housing portion at a position corresponding to the sealing portion, so that oil can be supplied directly to the sealing portion; forms second oil supply passages as radial, straight grooves in the inner wall of the front housing portion, so that oil can flow smoothly from the crank chamber into the space closed off by the thrust bearing; and forms a third oil supply passage in the shape of a circular groove about the rotating shaft in the inner wall of the housing portion so as to place the first and second oil supply passages in communication with one another, thereby enabling oil to flow through the first, second, and third oil supply passages so communicating (paragraphs [0061]–[0063]). As a result, according to the Patented Invention at Issue, during operation of the compressor, oil that has flowed into the inner wall of the housing portion through the second oil supply passages flows into the third oil supply passage and is then supplied to the first oil supply passage (paragraph [0065]); and where the quantity of oil that has flowed into the third oil supply passage through the second oil supply passages exceeds the quantity required by the first oil supply passage, the third oil supply passage also serves to store oil temporarily (paragraph [0073]). Through such means, the Patented Invention at Issue obtains the effects of improved lubrication, as oil is supplied “smoothly” to the bearing portion supporting the rotating shaft, and of reduced wear of the sealing portion, as oil can be supplied “continuously” to the sealing portion (paragraphs [0075], [0077]).

C) As set forth above, taking into account the description of the invention in the specification of the Patented Invention at Issue on the basis of the ordinary meaning of the claim language, the Language at Issue may be construed as “that oil that has flowed into the third oil supply passage through the second oil supply passages can be provided smoothly and continuously to the first oil supply passage.” Furthermore, from the standpoint of a person of ordinary skill in the art, the Language at Issue may be understood more specifically as having the following function and operational effect: namely, that even where the quantity of oil that has flowed from the crank chamber into the third oil supply passage through any one or more of the second oil supply passages temporarily varies owing to changes in oil flow caused by direct or indirect influences on the compressor during vehicle operation — such as acceleration and deceleration and turning of the vehicle, changes in gradient, and whether and to what degree the air-conditioning system is operating — oil that has flowed into the third oil supply passage through the other second oil supply passages, or oil previously stored temporarily in the third oil supply passage, is supplied to the first oil supply passage, whereby oil is provided smoothly and continuously to the first oil supply passage.

D) Considering, in addition to the facts above, such matters as that the first, second, and third oil supply passages of Claim 1 at Issue are all interconnected, and that the only mechanism determining the direction and quantity of flow of oil that has flowed into the third oil supply passage through the second oil supply passages is the pressure of the oil within that flow path, it is reasonable to find that the minimum specific technical configuration determined as “that oil that has flowed into the third oil supply passage through the second oil supply passages can be provided smoothly and continuously to the first oil supply passage” is “that the pressure of the oil is continuously maintained in the direction of the first oil supply passage within the oil path by which oil that has flowed into the third oil supply passage

through the second oil supply passages is provided to the first oil supply passage"; and it appears that only where such a minimum technical configuration is satisfied will the ordinary meaning of Claim 1 at Issue as discussed above — "that oil that has flowed into the third oil supply passage through the second oil supply passages can be provided to the first oil supply passage according to the need of the first oil supply passage" — likewise be satisfied.

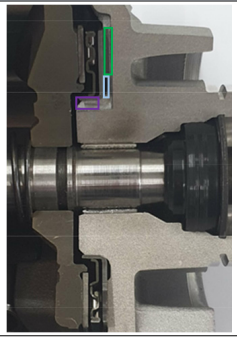
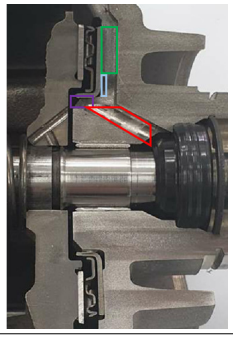
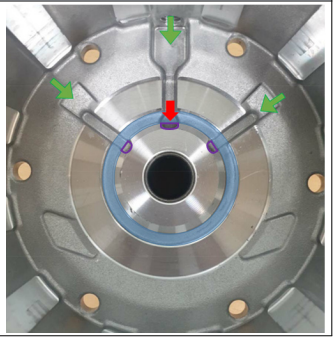
3) Specific Determination

A) For the following reasons, it does not appear that, in the Defendant's Products, the pressure of the oil can be continuously maintained in the direction of the first oil supply passage along the path by which oil that has flowed into the Groove at Issue through the second oil supply passages reaches the first oil supply passage. It is therefore difficult to find that the Defendant's Products have Element 10.

(1) In the Defendant's Products, the first oil supply passage is located at 12 o'clock, the uppermost point within the Groove at Issue corresponding to the third oil supply passage; accordingly, leaving aside the oil supplied directly from the 12 o'clock second oil supply passage, which is directly connected to the first oil supply passage irrespective of the Groove at Issue, the oil pressure that must be continuously maintained in the direction of the first oil supply passage along the flow path by which oil that has flowed into the Groove at Issue through the 10 o'clock, 12 o'clock, and 2 o'clock second oil supply passages is provided to the first oil supply passage ultimately means the upward pressure within the Groove at Issue from the second oil supply passages located at 10 o'clock and 2 o'clock toward the first oil supply passage located at 12 o'clock. Only if such upward pressure is maintained can the oil that has flowed into the Groove at Issue through the 2 o'clock and 10 o'clock second oil supply passages, as well as the oil that has flowed into the Groove at

Issue through the 12 o'clock second oil supply passage, be supplied again to the first oil supply passage.

(2) In order to consider whether the upward pressure by which oil reaches the first oil supply passage can be maintained in the Defendant's Products, this court first examines the principal paths by which oil enters and is discharged within the oil path along which oil that has flowed into the Groove at Issue through the second oil supply passages is supplied to the first oil supply passage.

Sectional view at the 2 o'clock (10 o'clock) position (Defendant's Exhibit No. 68)	**Sectional view at the 12 o'clock position (Defendant's Exhibit No. 67)**	**Front view (Plaintiff's Exhibit No. 4)**
		

Of the oil that has entered through the 10 o'clock or 2 o'clock second oil supply passage (green), the oil remaining after escaping into the 10 o'clock or 2 o'clock axial flow passage (purple) flows into the Groove at Issue (blue), and the pressure that oil exerts on the Groove at Issue acts as an upward pressure within the Groove at Issue from the 10 o'clock and 2 o'clock directions toward the 12 o'clock direction. By contrast, of the oil that has entered through the 12 o'clock second oil supply passage (green), the oil remaining after being discharged into the first oil supply passage (red) and the 12 o'clock axial flow passage (purple) flows into the Groove at Issue, and the pressure that oil exerts on the Groove at Issue acts as a downward pressure from the 12 o'clock direction toward the 10 o'clock and 2

o'clock directions. Accordingly, the residual pressure, which is the pressure remaining after the upward pressure exerted on the Groove at Issue by the oil that has flowed into it through the 10 o'clock and 2 o'clock second oil supply passages is offset by the downward pressure exerted on the Groove at Issue by the oil that has flowed into it through the 12 o'clock second oil supply passage and by the downward pressure of gravity acting on the Groove at Issue as a whole, constitutes the upward pressure within the Groove at Issue toward the first oil supply passage, and that is the pressure that must be maintained for the technical configuration determined by the Language at Issue in Claim 1 at Issue to be present.

(3) However, given the structure of the Defendant's Products, there does not appear to be any particular difference in the dynamic pressure of the oil entering through the second oil supply passages in each direction; and since the first, second, and third oil supply passages and the axial flow passages communicate internally and are closed to the exterior, absent special circumstances the oil that has flowed in through the second oil supply passages and the oil discharged through the axial flow passages and the first oil supply passage appear to reach equilibrium once the Groove at Issue has been filled. The upward and downward pressures within the Groove at Issue may therefore be schematized simply in terms of the quantities of oil entering and being discharged, as follows (the scheme below considers only the 2 o'clock direction, corresponding to half of the Defendant's Products).

○ Upward pressure from 2 o'clock to 12 o'clock
≈ (quantity of oil entering through the 2 o'clock second oil supply passage − quantity of oil discharged through the 2 o'clock axial flow passage)

○ Downward pressure from 12 o'clock to 2 o'clock
≈ (quantity of oil entering through the 12 o'clock second oil supply passage − quantity of oil discharged through the 12 o'clock axial flow passage − quantity of oil discharged into the first oil supply passage)

× 1/2[3] + downward pressure due to gravity

∴ Upward pressure that must be maintained within the Groove at Issue = upward pressure from 2 o'clock to 12 o'clock − downward pressure from 12 o'clock to 2 o'clock

(4) First, this court examines the first oil supply passage, which exists only at the 12 o'clock position. The sealing portion to which the first oil supply passage is connected has a very small space of approximately 0.94 cc, and the gap between the plain bearing and the rotating shaft — the only path by which oil can be discharged from the sealing portion — is very fine (0.54-2.10 ㎟), so it appears unlikely that oil would be readily discharged through it. Indeed, in the video of experiments in which the Defendant poured oil onto a roller bearing and a plain bearing respectively, it is confirmed that, unlike the roller bearing (Defendant's Exhibit No. 48-1), almost no oil is discharged through the plain bearing (Defendant's Exhibit No. 48-2). The same is true in the Defendant's other experimental video (Defendant's Exhibit No. 69). Since the quantity of oil discharged from the sealing portion through the plain bearing is thus negligible, the quantity of oil discharged into the first oil supply passage connected thereto likewise appears negligible. It is reasonable to find that the effect of the first oil supply passage on the flow of oil within the Groove at Issue is at a negligible level.

---

3) The oil that flows into the Groove at Issue through the second oil supply passage at the 12 o'clock position divides into two branches, toward 10 o'clock and toward 2 o'clock, so that ordinarily only half of it flows in the 2 o'clock direction. The oil that flows into the Groove at Issue through the second oil supply passage at the 2 o'clock position will likewise divide into two branches, toward 12 o'clock and toward 6 o'clock; however, the oil flowing toward 6 o'clock will promptly fill the closed space below and be unable to flow further in that direction. Accordingly, as regards the upward pressure from 2 o'clock toward 12 o'clock, the quantity of oil flowing into the Groove at Issue through the second oil supply passage at the 2 o'clock position must not be multiplied by 1/2.

In this regard, the Plaintiff asserts that in its experimental video, bubbles escaping from the first oil supply passage toward the Groove at Issue are confirmed, and that this shows that oil within the Groove at Issue flows into the first oil supply passage in a volume equal to that of those bubbles.

Examining this, according to the results of this court's inspection, it is indeed confirmed that at a compressor rotation speed of 800 rpm relatively small bubbles rise from the first oil supply passage toward the Groove at Issue, and that as the rotation speed increases to 4,000 rpm much larger bubbles than before rise. However, that oil enters in a volume equal to that of the bubbles discharged through the first oil supply passage into the Groove at Issue must simultaneously mean that the same quantity of oil is discharged somewhere. Given the structure of the sealing portion, however, the only path by which oil can escape from the sealing portion is the gap between the plain bearing and the rotating shaft, and as discussed above that gap is very narrow, so it does not appear that oil could continuously escape through that gap in a quantity equal to the bubbles continuously emerging from the first oil supply passage. Rather, according to the expert opinions submitted by the Plaintiff and the Defendant respectively (Plaintiff's Exhibit No. 64; Defendant's Exhibit No. 77), taking together such facts as that where a liquid is rotated rapidly and its pressure drops, cavitation may occur in which components dissolved in the liquid vaporize and form bubbles; that cavitation intensifies the faster the liquid rotates; and that, indeed, in the Plaintiff's experiment as well more bubbles were generated the faster the rotation, it is reasonable to find that the bubbles arising through the first oil supply passage were generated by refrigerant dissolved in the oil vaporizing due to the rapid rotation of the oil, rather than by oil leaking out. The Plaintiff's assertion is therefore not accepted.

(5) Next, this court examines the second oil supply passages and the axial flow passages. As shown in the drawings above, the

second oil supply passages, the axial flow passages, and the Groove at Issue are all formed in communication with one another, so that, absent special circumstances[4], the cross-sectional area of each passage appears to correlate with the quantity of oil entering or being discharged through that passage. The cross-sectional areas of the second oil supply passages and axial flow passages at the 10 o'clock, 12 o'clock, and 2 o'clock positions of the Defendant's Products are as set forth in the table below.[5]

Category	10 o'clock	12 o'clock	2 o'clock	Total
Second oil supply passage (rectangular)	4 (width) × 2 (depth) = 8㎟	4 (width) × 4 (depth) = 16㎟	4 (width) × 2 (depth) = 8㎟	32㎟
Axial flow passage (semicircular)	10.7㎟	12.9㎟	10.7㎟	34.3㎟

As set forth above, the cross-sectional area of each of the 10 o'clock and 2 o'clock second oil supply passages (8 ㎟) falls short of that of its axial flow passage (10.7 ㎟) (74.8%), whereas the cross-sectional

4) Circumstances that could constitute special circumstances here would include, for example, that oil is pressurized as it flows into the second oil supply passage, or that a pressure drop in the opposite direction may be caused as oil is discharged through the axial passage. The Plaintiff advances assertions in this regard, but, as discussed below, they are all difficult to accept.

5) The sizes (cross-sectional areas) of the oil paths cited in the judgment of the first instance are stated only in the Defendant's briefs (the Defendant's brief dated March 29, 2022; the Defendant's brief dated June 9, 2023, pages 4 through 8; the Defendant's brief dated August 28, 2023, page 22; and others), and the Defendant did not separately submit evidence supporting them. However, the cross-sectional area of the second oil supply passage presented by the Defendant (8 ㎟, excluding the one at the 12 o'clock position) is very close to the cross-sectional area of 8.04 ㎟ calculated from the Plaintiff's measurements (see the table on page 12 of Defendant's Exhibit No. 58 and pages 2 through 4 of Plaintiff's Exhibit No. 58) (= the cross-sectional area of a trapezoid with an upper width of 4.92 ㎜, a lower width of 3.82 ㎜, and a height of 1.84 ㎜). In light of these circumstances, the comparison will be made using the above figures.

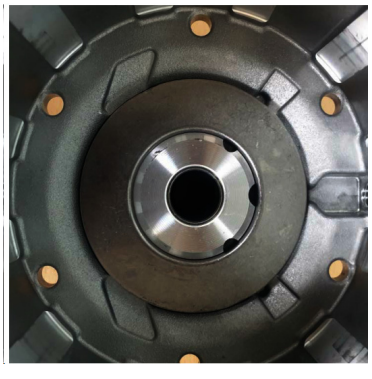
area of the 12 o'clock second oil supply passage (16 ㎟) is larger than that of its axial flow passage (12.9 ㎟) (124%); accordingly, a substantial portion of the oil entering through the second oil supply passage at the 12 o'clock position will flow into the Groove at Issue without being discharged into the axial flow passage, whereas most of the oil entering through the 10 o'clock and 2 o'clock second oil supply passages appears likely to be discharged into the axial flow passages. Taking together such circumstances with such facts as that, viewed overall, the combined cross-sectional area of the three axial flow passages through which oil is discharged from the Groove at Issue (34 ㎟) is larger than the combined cross-sectional area of the three second oil supply passages through which oil enters the Groove at Issue (32 ㎟); that the cross-sectional areas of the axial flow passages, at 10.7 ㎟, 12.9 ㎟, and 10.7 ㎟ respectively, are all larger than the cross-sectional area of the Groove at Issue of 8.24 ㎟ (Plaintiff's Exhibit No. 58); and that gravity appears likely to act continuously as a downward pressure in the Groove at Issue — even taking into account that the oil that has flowed into the Groove at Issue through the 12 o'clock second oil supply passage divides and flows in halves toward the 10 o'clock and 2 o'clock directions — it appears not only that it would itself be difficult for the pressure of the oil within the path by which oil that has flowed into the Groove at Issue through the second oil supply passages reaches the first oil supply passage to be formed in the direction of the first oil supply passage, that is, upward, in the Defendant's Products, but also that, even if such pressure were temporarily formed, it would be difficult for that pressure to be continuously maintained.

(6) In this regard, the Plaintiff asserts that, in the course of the compressor's operation, oil is violently dispersed by the rotational motion of the rapidly rotating body and thereby supplied to the second oil supply passages, and that the kinetic energy thus imparted can be converted into pressure causing the oil that has flowed into the Groove

at Issue through the 10 o'clock or 2 o'clock second oil supply passage to flow in the 12 o'clock direction within the Groove at Issue. Put differently, this amounts to saying that, because oil that has flowed into the Groove at Issue through the second oil supply passages is provided in a pressurized state, the flow of oil within the Groove at Issue cannot be analyzed by reference to the cross-sectional areas of the second oil supply passages alone. However, the Plaintiff's assertion in this part is not accepted, for the following reasons.

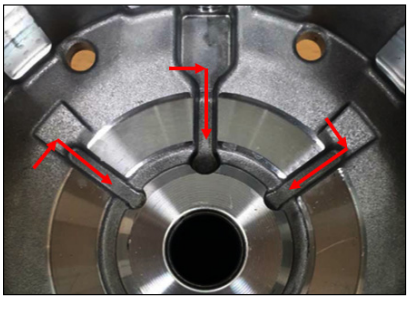
(a) Even if the oil dispersed by the motion of the rotating body has strong energy, a thrust bearing exists between the rotating body and the Groove at Issue, and the Groove at Issue portion is closed off by the thrust L race, so the kinetic energy due to centrifugal force can act only on the inlet side of the second oil supply passages and cannot be transmitted as such to the Groove at Issue (see Figure 1).

Figure 1



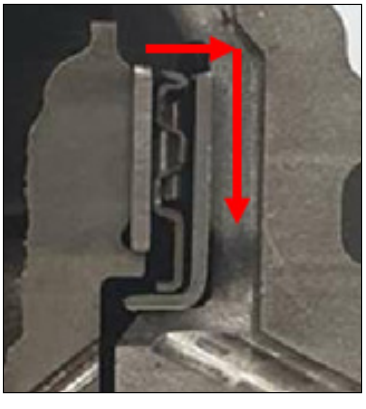
(b) Moreover, whereas the direction of the force applied to the oil by the rotational motion of the rotating body is close to the tangential direction of the circle, the second oil supply passages are formed radially in the inner wall of the housing portion, so that the direction of the force applied by the rotating body and the direction in which the oil must travel are close to perpendicular to each other (see Figure 2). In addition, the direction of the oil

Figure 2 — Direction of Motion of the Rotating Body and the Second Oil Supply Passage



entering the second oil supply passage and the second oil supply passage itself are likewise close to perpendicular (see Figure 3). Furthermore, oil, being a liquid, is not highly elastic, and the second oil supply passages are narrow channels blocked by the front housing and the thrust L race; accordingly, even if the oil reaches the front-housing-side inlet of a second oil supply passage at high speed through the rotational motion of the rotating body, a substantial portion of the kinetic energy imparted to the oil is inevitably dissipated in the course of passing through the second oil supply passage (most of the kinetic energy imparted to the oil appears likely to be converted into vibrational energy of the second oil supply passage).

Figure 3 — Direction of Oil Inflow and the Second Oil Supply Passage



(c) In addition, the kinetic energy from the rotating body is transmitted not only to the oil entering the 10 o'clock and 2 o'clock second oil supply passages but also to the oil entering the 12 o'clock second oil supply passage, and there is no basis for finding any particular difference in the kinetic energy imparted to the oil entering the three second oil supply passages in the respective directions. That is, even if the kinetic energy from the rotating body could be converted into upward pressure of the oil that has flowed through the 10 o'clock and 2 o'clock second oil supply passages, such kinetic energy would conversely be converted into downward pressure in the oil that has flowed through the 12 o'clock second oil supply passage, so that the effects of the kinetic energy from the rotating body would ultimately be offset against one another.

(d) In this connection, the expert opinion submitted by the Plaintiff in support of its assertion (Plaintiff's Exhibit No. 64) states,

in substance, that the kinetic energy from the rotating body can be converted into pressure of the oil entering not only through the 10 o'clock and 2 o'clock second oil supply passages but also through the 12 o'clock second oil supply passage; that such pressure may temporarily differ among the 12 o'clock, 2 o'clock, and 10 o'clock directions; and that, since the kinetic energy of the rotating body is so great, the difference in kinetic energy that may arise among the directions could by itself overwhelm the pressure due to gravity. However, it is apparent that the opinion in that report is premised on the circumferential velocity due to the rotational motion of the rotating body being converted as such into pressure of the oil, as set forth below.

Plaintiff's Exhibit No. 64

Dynamic pressure is pressure attributable to the kinetic energy of a fluid and is defined by the following equation (Equation (3)). Since dynamic pressure increases in proportion to the square of velocity, the higher the rotation speed, the more rapidly the dynamic pressure increases.

$$P_{dynamic} = \frac{1}{2}\rho V^2 \quad (3)$$

ρ: density of the oil [kg/m^3]

V: velocity of the oil [m/s]

The density of the Polyalkylene glycol (PAG) oil used in this experiment is estimated at approximately 1,000 kg/m^3 (Table 2, Redhwan et al., 2020); the radius at the outermost position of passage #2 is approximately 40 mm (= 0.04); and **considering only the circumferential velocity of the oil (disregarding the axial and radial velocities)**, V = rω (where ω is the angular velocity [rad/s]), so that

800rpm: $P_{dynamic} = \frac{1}{2} \times 1{,}000 \times (0.04 \times 800 \times \frac{2\pi}{60})^2 \cong$ 5,600 Pa, that is, approximately 0.05 atm[6)]

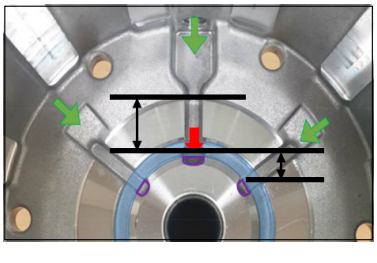
4,000rpm: $P_{dynamic} = \frac{1}{2} \times 1{,}000 \times (0.04 \times 4{,}000 \times \frac{2\pi}{60})^2 \cong$ 10,000 Pa, that is, approximately 1.4 atm.

6) The dynamic pressure relation used in that expert opinion does not reflect the direction of the kinetic energy of the rotating body or the direction of the second oil supply passage (see pages 6 and 7 of Plaintiff's Exhibit No. 64).

In calculating the dynamic pressure above, **the axial and radial velocity components of the oil (which are difficult to ascertain) were disregarded, and only the circumferential velocity component at the largest radial position in passage #2 was considered**. However, where the axial and radial velocity components are also taken into account, the magnitude of the overall velocity increases, so the magnitude of the dynamic pressure would also increase beyond the above figure.

(e) However, as discussed above, the direction of rotation and the second oil supply passages are in a perpendicular relationship, so the amount of energy actually converted from kinetic energy into dynamic pressure is inevitably negligible. If only a negligible portion of the kinetic energy is thus converted into pressure, the conclusion of the opinion, premised on the converted kinetic energy being far greater than gravity, can hardly be regarded as significant. Moreover, that opinion offers no explanation whatsoever as to whether such differences among the 12 o'clock, 10 o'clock, and 2 o'clock directions can structurally arise continuously, or as to the reason such differences arise. It is difficult to regard that opinion as being based on the actual structure of the Defendant's Products.

(f) Meanwhile, apart from kinetic energy, the principal energy possessed by oil that has entered the inlet of a second oil supply passage will be the potential energy corresponding to the height difference between the inlet and the outlet of that second oil supply passage. Since the 12 o'clock second oil supply passage connects vertically to the Groove at Issue, whereas the 10 o'clock and 2 o'clock passages connect to the Groove at Issue at oblique angles, the potential energy of the oil entering the 12 o'clock second oil supply passage appears likely to be greater than that of the oil entering the 10 o'clock and 2 o'clock second oil supply passages.



(7) The Plaintiff also asserts, in substance, that in light of the axial flow passages and the surrounding structure, it is difficult for oil that has entered a second oil supply passage to be discharged through the axial flow passage. Put differently, this amounts to saying that the flow of oil discharged from the Groove at Issue into the axial flow passages cannot be analyzed by reference to the cross-sectional areas of the axial flow passages alone. However, for the following reasons, Plaintiff's Exhibit No. 64 and the other evidence submitted by the Plaintiff are insufficient to establish the Plaintiff's assertion, and there is no other evidence to support it. The Plaintiff's assertion is therefore not accepted.

(a) In this regard, this court first examines the expert opinion submitted by the Plaintiff in support of its assertion (Plaintiff's Exhibit No. 64).

Plaintiff's Exhibit No. 64
Some of the oil that has entered a second oil supply passage may be discharged through the axial flow passage, but it is highly unlikely that all or a substantial quantity of the oil that has entered through the second oil supply passage would be discharged through the axial flow passage. A substantial portion of the oil entering through the 12 o'clock second oil supply passage will be discharged into the first oil supply passage. The oil entering through the 10 o'clock and 2 o'clock second oil supply passages, after entering radially inward (the －r direction in Figure 3) and then stagnating, turns 90 degrees, with some flowing into the third oil supply passage and some possibly flowing toward the axial flow passage; however, the end of the axial flow passage is partially blocked. In the end space of the axial flow passage (Figure 2) there is, on one side, the rotating body wall that rotates together with the shaft, and on the other side, the fixed front housing wall. In addition, the rotating body has two through holes, which constitute a flow path that rotates together with the rotating body. At this time, oil subjected to centrifugal force through the rotating body through holes will be forcibly moved, or pumped, from the rotating body through holes toward the end of the axial flow passage (the flow indicated as ① in Figure 2 below). In addition, oil subjected to centrifugal force by the rotating body wall will be pumped radially outward along the rotating body wall (the flow indicated as ② in Figure 2 below).

Through these two effects, a substantial portion of the pumped oil will produce the effect of partially blocking the ends of the 10 o'clock, 12 o'clock, and 2 o'clock axial flow passages (blockage). Meanwhile, this blockage effect will strengthen in proportion to the square of the rotation speed. That is, the higher the rotation speed, the smaller the quantity of oil that flows out through the axial flow passages among the oil that has entered the second oil supply passages, and instead the greater the quantity of oil that moves through the first oil supply passage or the third oil supply passage.

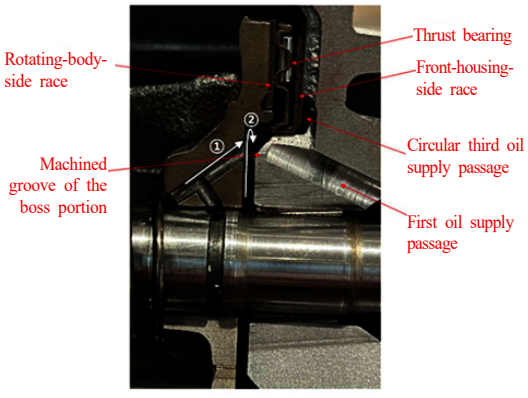


Figure 2. Surroundings of the Machined Groove of the Boss Portion

(b) The principal factors on which the expert in that opinion based the view that oil entering through the second oil supply passages would be unlikely to be discharged through the axial flow passages are that ① oil entering through the rotating body through holes and ② oil subjected to centrifugal force by the rotating body wall block the ends of the axial flow passages. However, ① since the rotating body through holes rotate at high speed together with the rotating body, the moment at which a rotating body through hole faces an axial flow passage, as in Figure 2 above, can only be instantaneous. The effect of oil entering through the rotating body through holes on the 12 o'clock axial flow passage may safely be regarded as negligible. ② Furthermore, sufficient space for oil to escape exists between the rotating-body-side race and the thrust bearing or the front-housing-side race, and negative pressure directed toward the outer periphery of the rotating body arises from the rotation of the rotating body, so oil subjected to centrifugal force by the rotating body wall will be discharged radially toward the outer

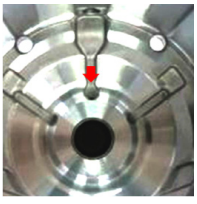
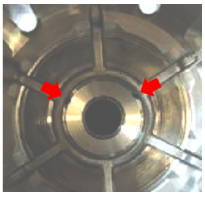
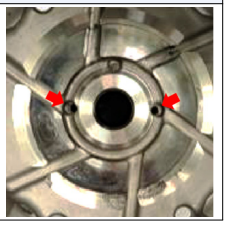
periphery of the rotating body; it therefore appears unlikely that such oil would remain at the end of the axial flow passage as it is. Indeed, in the video of the experiment the Defendant conducted with the Defendant's Products (Defendant's Exhibit No. 69), it is clearly confirmed that oil injected into the second oil supply passage scatters radially toward the thrust bearing.

(c) Above all, that expert opinion has difficulty explaining the overall circulation of oil within a swash plate compressor. There is no particular dispute between the parties as to the fact that oil continuously enters the Groove at Issue from the second oil supply passages, and this is also recognized by the results of this court's inspection. As discussed above, however, the quantity of oil entering the first oil supply passage appears not to be large, so if oil could not be discharged into the axial flow passages, the Groove at Issue would instantly fill with oil entering from the second oil supply passages, and in that case it would become difficult for further oil to enter the Groove at Issue from the second oil supply passages. Accordingly, oil not being discharged into the axial flow passages cannot explain the phenomenon of oil continuously entering the Groove at Issue from the second oil supply passages.

(d) Even assuming that oil is smoothly discharged into the first oil supply passage, the oil entering the first oil supply passage cannot be discharged through the sealing portion, so the only path by which that oil can be discharged is the gap of the plain bearing. After that oil is discharged through the plain bearing, it can only be drawn upward by centrifugal force toward the end of the axial flow passage. Ultimately, both the oil discharged through the plain bearing and the oil discharged into the axial flow passage can only meet at the end of the axial flow passage; and if oil could not smoothly circulate at the end of the axial flow passage toward the rotating-body-side race, there would be no way to explain where the oil that continuously enters through the second oil supply passages in each direction — as confirmed

in the various experiments and inspections — ultimately flows. By any measure, one cannot but find that oil is smoothly discharged into the axial flow passages.

(8) Meanwhile, examining how the technical configuration of Element 10 as determined by this court is implemented in the Plaintiff's products practicing Claim 1 at Issue can also serve as important reference material in relation to whether the Defendant's Products have Element 10. As shown in the figure below, in the Plaintiff's products practicing Claim 1 at Issue, not only are the axial flow passages that discharge oil from the Groove at Issue to the exterior formed markedly narrower — visibly so to the naked eye — than the second or third oil supply passages, but the third oil supply passage is also formed relatively deep, giving a structure in which the pressure of the oil is readily maintained. Moreover, it can be seen that the first oil supply passage is located below at least one second oil supply passage to which it is not directly connected, giving a structure in which the pressure of the oil within the flow path from the second oil supply passages through the third oil supply passage to the first oil supply passage can be continuously maintained in the direction of the first oil supply passage at least by gravity (Plaintiff's Exhibits Nos. 2 and 3; Defendant's Exhibit No. 25). That is, unlike the Defendant's Products (DVE12, DVE16), the Plaintiff's products practicing Claim 1 at Issue (VS12E, VS16E) have the technical configuration of the Language at Issue as determined above by this court.

Defendant's Products (DVE12)	VS12E	Defendant's Products (DVE16)	VS16E
			

B) Even if, contrary to the general understanding of a person

of ordinary skill in the art, the Plaintiff intended that the configuration of the Language at Issue in Claim 1 at Issue be present so long as there is merely a possibility that oil that has flowed into the third oil supply passage through the second oil supply passages will be supplied to the first oil supply passage, a functional configuration premised on such a construction cannot be regarded as falling within the scope of rights of Claim 1 at Issue, for the following reasons. Accordingly, even if, in the Defendant's Products, "there is a possibility that oil that has flowed into the third oil supply passage through the second oil supply passages will be supplied to the first oil supply passage," that circumstance alone does not permit a finding that the Defendant's Products have Element 10.

(1) As discussed above, in the Related Invalidation Action the court held that the inventive step of Claim 1 at Issue was not denied, on the ground that all of the configurations of Claim 1 at Issue other than Element 10 were publicly known through the prior art, but Element 10 was not publicly known in the prior art and it was difficult to find that a person of ordinary skill in the art could readily invent Element 10 from the prior art.

(2) In particular, in the Related Invalidation Action the court focused not so much on the shape of a circular groove within Element 10 as on whether the corresponding configuration of Prior Art 3 (a circular roughened surface) was "in the shape of a circular groove placing the first oil supply passage and the second oil supply passages in communication with one another, causing oil that has flowed into the third oil supply passage through the second oil supply passages to be supplied to the first oil supply passage, temporarily storing oil during operation of the compressor, and having the function and operational effect of allowing lubrication to be carried out smoothly"; and this corresponds precisely to the function and operational effect of the technical configuration determined by the Language at Issue, namely "the third oil supply passage is formed in the inner wall of the

front housing portion in the shape of a circular groove about the rotating shaft, so that oil that has flowed into the third oil supply passage through the second oil supply passages can be supplied to the first oil supply passage."

(3) That is, since all of the configurations of Claim 1 at Issue other than Element 10 were publicly known in the prior art or could readily be derived by a person of ordinary skill in the art by combining the prior art, whether a person of ordinary skill in the art can practice Claim 1 at Issue comes down to the question whether the technical configuration determined by the Language at Issue in Element 10 can be practiced. Nevertheless, the Language at Issue in Element 10 of Claim 1 at Issue — in particular "can be supplied" — is neither separately defined nor limited in meaning in the specification of the Patented Invention at Issue (for example, as to in what quantity and how continuously oil must be supplied for it to be regarded as being provided according to the need of the first oil supply passage, and the like), nor is the technical configuration making that possible disclosed (FIG. 5 of the specification of the Patented Invention at Issue appears merely to disclose the shape of the third oil supply passage and the structure placing the first and second oil supply passages in communication); accordingly, it is difficult for a person of ordinary skill in the art to readily practice Claim 1 at Issue on the basis of the statements in the specification of the Patented Invention at Issue alone, or indeed to predict what configuration would infringe Claim 1 at Issue.

(4) Furthermore, as discussed above, the mere possibility that oil that has flowed into the third oil supply passage through the second oil supply passages will be provided to the first oil supply passage does not appear to achieve the technical concept of the Patented Invention at Issue — that is, the function and operational effect of providing oil that has entered through the second oil supply passages "smoothly and continuously" to the sealing portion by

forming the first, second, and third oil supply passages within the closed housing portion.

(5) Nevertheless, construing the Language at Issue literally, as the Plaintiff asserts, to cover every configuration in which there is a possibility that oil that has flowed into the third oil supply passage through the second oil supply passages will be supplied to the first oil supply passage, and regarding products having such a configuration as falling within the scope of rights of Claim 1 at Issue, would be not only manifestly unreasonable in light of the other statements in the specification of the Patented Invention at Issue, but would also undermine legal certainty for third parties; it is reasonable to find that this would be contrary to the principles of justice and equity.

4) Determination on the Plaintiff's Other Arguments

A) The Plaintiff asserts that, since its own experimental results and the results of this court's inspection confirm that oil entering through the 10 o'clock and 2 o'clock second oil supply passages moves to the first oil supply passage, the Defendant's Products have Element 10.

Examining this, according to the following circumstances, which are established by the evidence cited above, the statements and images in Plaintiff's Exhibits Nos. 52, 54, and 76 and Defendant's Exhibit No. 75, and the results of this court's inspection, the evidence submitted by the Plaintiff is insufficient to find that the Defendant's Products have Element 10, and there is no other evidence to support such a finding. The Plaintiff's assertion in this part is therefore not accepted.

(1) On October 24, 2023, this court conducted an on-site inspection in which the front housing of the Defendant's Products was modified by replacing it with transparent acrylic, and the product was operated with its rotation speed raised from 800 rpm to 6,000 rpm while the flow of oil within the Groove at Issue was observed. According to the results of that inspection, at a rotation speed of 800

rpm the oil entering the Groove at Issue through the 12 o'clock second oil supply passage clearly flows toward the 10 o'clock and 2 o'clock directions, that is, downward; but from the point at which the rotation speed begins to exceed approximately 4,000 rpm (the 1 minute 46 second segment of "MVI-0922 compressor front view.mp4" among the inspection videos), some bubbles can be observed stagnating or rising slowly. It is also confirmed that when the rotation speed of the Defendant's Products is lowered again (the 2 minute 45 second segment of "MVI-0922 compressor front view.mp4" among the inspection videos), the oil within the Groove at Issue likewise begins to flow downward again.[7] Similar results can also be confirmed in the experiment the Plaintiff conducted independently in a similar manner (Plaintiff's Exhibit No. 52).

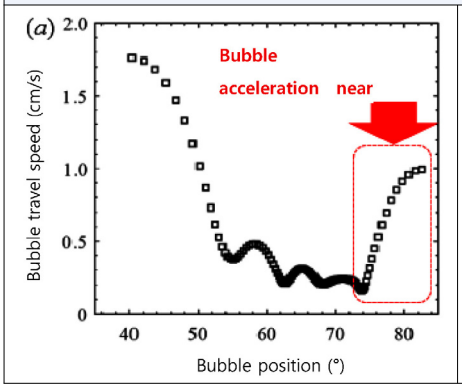
(2) However, on close observation of those inspection videos, it can be seen that relatively small bubbles still flow downward even in the high-speed environment at or above 4,000 rpm, and that only relatively large bubbles tend to stagnate or move upward. From the movement of the bubbles flowing within the Groove at Issue at each rotation speed alone, it is difficult to conclude that the oil within the Groove at Issue clearly flows in the 12 o'clock direction in the range at or above 4,000 rpm. Rather, according to the expert opinion on the Defendant's side (Defendant's Exhibit No. 75), the possibility cannot be excluded that the large bubbles showing upward movement in the 12 o'clock direction reflected not a change in the oil flow itself, but rather that, as the flow within the Groove at Issue descending from the 12 o'clock direction toward the 10 o'clock and 2 o'clock directions slowed, the buoyancy of the relatively large bubbles came to exceed the force exerted by the flow of oil within the Groove at Issue, causing them to head upward.

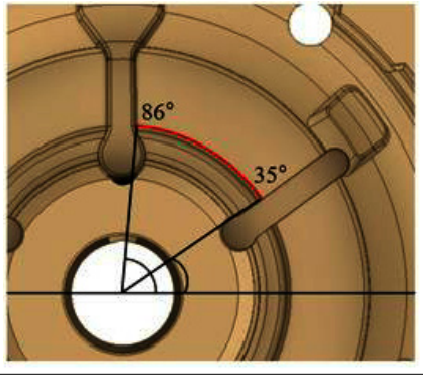
---

7) Comparing the video files "MVI-0922 compressor front view.mp4" and "MVI_4784 Control Panel.mp4," which were recorded simultaneously during the on-site inspection, reveals the flow of oil in the Defendant's Products and the rotational speed of the Defendant's Products at that point in time.

(3) In this regard, the Plaintiff asserts that if only buoyancy acted on the large bubbles, the speed of the bubbles ought rather to slow or stop as they approach the 12 o'clock direction, whereas the bubbles actually moving upward show acceleration as they approach the 12 o'clock direction, as shown in the figure below, and that the bubbles show such movement because the oil flows upward.

Plaintiff's Exhibit No. 74, page 5





That figure appears to show the correlation between bubble position and bubble travel speed, and in the experimental video (Plaintiff's Exhibit No. 52) it is indeed confirmed that bubbles are rapidly drawn in toward the 12 o'clock direction in the vicinity of the 12 o'clock direction. However, for the following reasons, it is difficult to regard the movement of those bubbles as accurately reflecting the flow of oil within the Groove at Issue.

(a) Even according to the above figure, the bubbles show typical movement no different from that due to buoyancy, from the end of the Groove at Issue at the 2 o'clock second oil supply passage up to a position of approximately 74°, close to the end of the Groove at Issue at the 12 o'clock second oil supply passage.

(b) The bubbles show a sharp increase in speed only in the 75°–86° range, having almost reached the 12 o'clock second oil supply passage; if the movement of those bubbles were due to the flow of oil rather than to buoyancy, it is determined that there would

be no reason for the bubbles, within the Groove at Issue — which is like an integrally connected pipe filled with oil — to move progressively more slowly in the 35°–74° range and then move unusually rapidly only in the 75°–86° range. Such movement of the bubbles merely shows that an external force acting mainly only in the 75°–86° range exists, rather than a general flow of oil within the Groove at Issue (a substantial portion of the oil entering from the 12 o'clock second oil supply passage escapes into the 12 o'clock axial flow passage, and large bubbles continuously emerge from the first oil supply passage. It is likely that the movement of the bubbles rapidly drawn in toward the 12 o'clock direction only upon reaching the vicinity of the 12 o'clock first oil supply passage is the result of the combined action of various forces, such as the flow of oil escaping into the axial flow passage and the influence of the bubbles emerging from the first oil supply passage).

(c) The Plaintiff also submitted another expert statement analyzing the results of an experiment tracking the positions of bubbles (Plaintiff's Exhibit No. 76). However, the model used in that experiment appears not to have a passage corresponding to the 12 o'clock axial passage. The experiment conducted with that experimental model can hardly be regarded as an experiment reflecting the structure of the Defendant's Products.

(4) Above all, it is necessary to take into account that, in the inspection results and the Defendant's experimental results, the oil within the Groove at Issue clearly flowed downward at a rotating body speed of 800 rpm, and only at some unidentifiable point after the rotation speed was raised to 4,000 rpm did the flow of oil within the Groove at Issue even show stagnation. Even when construed as favorably as possible to the Plaintiff, this court's inspection results show only that, in the Defendant's Products, upward flow of the oil within the Groove at Issue occurs only when the rotating body speed reaches at least 4,000 rpm. Taking the parties' assertions together,

however, the ratio of compressor to engine rotation speed is approximately 1.1−1.4:1[8], so a rotation speed of 4,000 rpm in the Defendant's Products corresponds to an engine speed of 2,857−3,636 rpm; such engine speeds are generally associated with the rotation speeds of high-speed vehicle travel and are far removed from idling or ordinary driving. In the absence of any basis for finding that the swash plate compressor of the Patented Invention at Issue does not require oil during idling or ordinary driving, such a flow of oil cannot be regarded as oil that has flowed into the third oil supply passage through the second oil supply passages flowing "continuously and smoothly" to the first oil supply passage.

(5) Meanwhile, the Plaintiff also conducted an experiment (Plaintiff's Exhibit No. 63) in which, as above, the front housing of a swash plate compressor was replaced with transparent acrylic but the 12 o'clock second oil supply passage was removed, and the product was initially operated at a rotation speed of 800 rpm before increasing the speed to 4,000 rpm while the flow of oil within the Groove at Issue was observed. According to the results of that experiment, it is indeed clearly confirmed that at a rotation speed of 800 rpm the oil in the Groove at Issue stagnates, and that in the high-speed environment the oil in the Groove at Issue flows into the 12 o'clock direction. However, since in the Defendant's Products the oil that has flowed into the Groove at Issue through the 12 o'clock second oil supply passage acts as a principal downward pressure within the Groove at Issue, such experimental results can hardly be regarded as experimental results reflecting the structure of the Defendant's Products.

C. Sub-conclusion

As set forth above, the Defendant's Products do not have Element

8) See the minutes of the fifth oral hearing before this Court. As to the ratio between the rotational speed of the compressor and that of the engine, the Plaintiff stated 1.2–1.4:1 and the Defendant stated 1.1–1.2:1.

10 of Claim 1 at Issue; accordingly, without further considering whether the Defendant's Products have the other elements of Claim 1 at Issue, the Defendant's Products do not fall within the scope of rights of Claim 1 at Issue. The Defendant's manufacture and sale of the Defendant's Products therefore likewise cannot be regarded as infringing the patent right in Claim 1 at Issue.

3. Conclusion

The Plaintiff's claim, which is premised on infringement of the patent right in Claim 1 at Issue, is without merit and must be dismissed. The judgment of the first instance, having reached the same conclusion, is proper. Accordingly, the Plaintiff's appeal is therefore dismissed, and the court renders its decision as set forth in the Order.

Presiding Judge Taeksoo JUNG
Judge Jaepil YUN
Judge Hyunjung SONG

[Appendix 2]

The Defendant's Products

1. Compressors that the Defendant manufactures and sells under model name DVE16 or DV(E)16



2. Compressors that the Defendant manufactures and sells under model name DVE12 or DV(E)12



3. Compressors that the Defendant manufactures and sells under model name DVE16N or DV(E)16N



4. Compressors that the Defendant manufactures and sells under model name DV12



5. Compressors that the Defendant manufactures and sells under model name DVE12N



6. Compressors that the Defendant manufactures and sells under model name DV13



7. Compressors that the Defendant manufactures and sells under model name DVE13



8. Compressors that the Defendant manufactures and sells under model name DVE14N



9. Compressors that the Defendant manufactures and sells under model name DV16



IP HIGH COURT OF KOREA
TWENTY-SECOND DIVISION
DECISION

Case No.	2023Na11078 Damages (Intellectual Property)
Plaintiff, Appellee and Appellant	SG Design Co., Ltd. Representative: Inside Director A Counsel for Plaintiff Landmark LLC Attorney in Charge Hunhee CHO
Defendant, Appellant and Appellee	Nine O'Clock Korea Co., Ltd. (former trade name: UWIN C&T Co., Ltd.) Representative Director B Counsel for Defendant Inheon Law Firm Attorneys in Charge Junggu NAM, Yuhyun HWANG, Jaeho KIM
District Court's Decision	Seoul Central District Court Decision 2021GaHap551723, decided September 15, 2023
Date of Closing Argument	March 28, 2025
Decision Date	May 28, 2025

ORDER

1. The part of the judgment of the first instance against the Plaintiff corresponding to the amounts additionally ordered to be paid below shall be reversed.

   The Defendant shall pay to the Plaintiff KRW 250,000,000, together with the amounts calculated at the rates of 5% per

annum on KRW 48,084,300 thereof from August 6, 2021, and on KRW 201,915,700 from July 5, 2023, in each case until May 28, 2025, and at the rate of 12% per annum from the following day until full payment.

2. The remainder of the Plaintiff's appeal and the Defendant's appeal are all dismissed.

3. Of the total litigation costs, one half shall be borne by the Plaintiff and the remainder by the Defendant.

4. Paragraph 1 may be provisionally executed as to the monetary payment ordered therein.

DEMAND FOR RELIEF

Plaintiff's Demand

The Defendant shall pay to the Plaintiff KRW 700,000,000, together with the amounts calculated at the rate of 12% per annum on KRW 150,000,000 thereof from the day following the date of service of the complaint in this case, and on KRW 550,000,000 from the day following the date of service of the application dated July 3, 2023 to amend the demand for relief, in each case until full payment.

Appellant's Demand

1. The Plaintiff

The part of the judgment of the first instance against the Plaintiff corresponding to the portion additionally ordered to be paid below shall be reversed. The Defendant shall pay to the Plaintiff KRW 598,084,300, together with the amounts calculated at the rate of 12% per annum on KRW 48,084,300 thereof from the day following the

date of service of a copy of the complaint in this case, and on KRW 550,000,000 from the day following the date of service of the application dated July 3, 2023 to amend the demand for relief, in each case until full payment.

2. The Defendant

The part of the judgment of the first instance against the Defendant shall be reversed, and the Plaintiff's claim corresponding to the reversed part shall be dismissed.

OPINION

1. Basic Facts

A. The Patented Invention at Issue and Sales of the Plaintiff's Products

The Plaintiff is a company established for the purposes of developing, manufacturing, and wholesaling and retailing mobile phone cases and mobile phone skins, and jointly owns with non-party C the patent right in the following patented invention (hereinafter "Patented Invention at Issue").

1) Title of Invention: Mobile phone skin

2) Filing Date of Application / Registration Date / Registration Number: August 5, 2013 / March 19, 2014 / No. 10-1378223

3) Patentees: The Plaintiff and C (each holding a 1/2 share)

4) Claims

[Claim 1] A skin capable of being disposed on the exterior of a mobile phone provided with a flash that emits light to the outside, comprising: a body provided in the direction in which the flash of the mobile phone is located; and a light incidence portion provided on the

light-emitting side of the flash; wherein, when the flash emits light, part of the light of the flash emitted to the outside is emitted into the light incidence portion, and the light transmitted to the light incidence portion spreads to other parts of the body; and wherein the body forms an opening at a front position facing the flash of the mobile phone, and the light incidence portion is located at the side of the opening (hereinafter "Claim 1 at Issue"; the remaining claims are referred to in the same manner).

[Claim 4] The mobile phone skin according to Claim 1, wherein the light incidence portion is located within the main light region in which the light of the flash of the mobile phone is emitted at or above a specific brightness.

[Claim 6] The mobile phone skin according to Claim 1, wherein the light incidence portion includes a portion located in front of the flash.[1)]

5) Principal Contents of the Invention: As set forth in Appendix 1.

B. The Defendant's Products

The Defendant is a company established for the purposes of manufacturing and distributing mobile phone accessories, and exports or sells domestically, through online shopping malls and the like, "lighting case" products usable with the iPhone and Galaxy models set forth in the table below (Plaintiff's Exhibits Nos. 6 and 7; hereinafter "Defendant's Products").

Defendant's Products	iPhone	Character	Defendant's Products	Galaxy	Character
Defendant's Product 1-1	IP6 / IP6S	Over Action Rabbit, Shiro & Maro, Esther Bunny	Defendant's Product 2-1	S7	Over Action Rabbit, Shiro & Maro

1) Since the Plaintiff asserts infringement only of Claims 4 and 6 at Issue, the text of the remaining claims is omitted, apart from Claims 4 and 6 at Issue and Claim 1 at Issue on which they depend.

Defendant's Products	iPhone	Character	Defendant's Products	Galaxy	Character
Defendant's Product 1-2	IP6 Plus / IP6S Plus	Over Action Rabbit, Shiro & Maro, Esther Bunny	Defendant's Product 2-2	S7 Edge	Over Action Rabbit, Shiro & Maro
Defendant's Product 1-3	IP7 / IP8	Over Action Rabbit, Shiro & Maro, Nine O'Clock, Flower, Landmark, The Little Prince, Gravity, Esther Bunny	Defendant's Product 2-3	S8	Over Action Rabbit, Shiro & Maro
Defendant's Product 1-4	IP7 Plus / IP8 Plus	Over Action Rabbit, Shiro & Maro, Nine O'Clock, Flower, Landmark, The Little Prince, Gravity, Esther Bunny	Defendant's Product 2-4	S8 Plus	Over Action Rabbit, Shiro & Maro
Defendant's Product 1-5	IPX / IPXS	Over Action Rabbit, Shiro & Maro, Nine O'Clock, Flower, Landmark, The Little Prince, Gravity, Esther Bunny	Defendant's Product 2-5	Note N8	Over Action Rabbit, Shiro & Maro, Esther Bunny
Defendant's Product 1-6	IPXR	Esther Bunny	Defendant's Product 2-6	S9	Over Action Rabbit, Shiro & Maro
Defendant's Product 1-7	IPXS MAX	Esther Bunny	Defendant's Product 2-7	S9 Plus	Over Action Rabbit, Shiro & Maro

C. Producers and Sellers of the Mobile Phone Skins and Lighting Cases

1) The lighting cases, which are the Defendant's Products, were manufactured using a "built-in film sheet" (hereinafter "Film at Issue") that includes all of the elements of Claims 4 and 6 at Issue. The Film at Issue was produced solely by non-party BQM Co., Ltd. (hereinafter "BQM"), and the lighting cases were assembled and produced solely by non-party Nbits Co., Ltd. (hereinafter "Nbits"), which was supplied with the Film at Issue.

2) The lighting cases produced by Nbits were sold not only by the Defendant but also by Nbits and by Asca Korea Co., Ltd. (hereinafter "Asca Korea"), of which C is the representative director; and on January 5, 2019, C established a sole proprietorship, KD Company [hereinafter "C (KD Company)"], and sold them directly as well.

3) The Defendant's Products were all used only on smartphone models released before May 2019, and have not been used on models released thereafter.

D. Procedural History of Related Cases

1) Preliminary Injunction Case

On September 6, 2018, the Plaintiff filed with the Seoul Central District Court (Case No. 2018KaHap21302) an application for preliminary injunction against the Defendant and others seeking prohibition of infringement and other relief, on the ground that the "lighting cases" manufactured and sold by the Defendant and others infringed the Patented Invention at Issue; on April 1, 2019, that court, finding it prima facie established that the above "lighting cases" infringed the Patented Invention at Issue, issued a preliminary injunction ordering that "the Defendant and others shall not produce, transfer, or otherwise deal in the lighting case products" (hereinafter "Preliminary Injunction at Issue").

2) Invalidation of Registration Case

On April 12, 2019, the Defendant filed a petition for invalidation against the Plaintiff and C, the patentees, with respect to Claim 1 and Claims 4 through 21 at Issue; on November 4, 2019, the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB") rendered an administrative decision granting that petition on the ground that the novelty or inventive step of each of those inventions was denied

(IPTAB Case No. 2019Dang1169). On November 12, 2019, the Plaintiff brought an action seeking revocation of that decision; on August 21, 2020, the IP High Court revoked the part of that decision relating to Claim 4 and Claim 6 at Issue, on the ground that the inventive step of Claims 4 and 6 at Issue was not denied (IP High Court Case No. 2019Heo8033). The Defendant appealed against that judgment, but the appeal was dismissed (Supreme Court Case No. 2020Hu11325) and the judgment became final and conclusive.

On August 30, 2021, in accordance with the purport of the above judgment that became final, the IPTAB found that the inventive step of Claims 4 and 6 at Issue was not denied and that the Defendant's assertion that Claim 4 at Issue had a ground of invalidity for failure to satisfy the description requirements was likewise not accepted, and rendered an administrative decision dismissing the Defendant's petition seeking invalidation of Claims 4 and 6 at Issue [IPTAB Case No. 2021Dang(Revocation Decision)4].

3) Criminal Case

The Plaintiff filed a criminal complaint against B, the Defendant's representative director, on suspicion of violating the Patent Act; on or around December 14, 2022, a prosecutor of the Seoul Central District Prosecutors' Office issued a non-prosecution disposition on the ground of no charge (insufficient evidence), including that "since different principles apply to civil liability and criminal liability in terms of their underlying ideas, burden of proof, and standard of proof, the fact that a judgment recognizing patent infringement was rendered in civil proceedings upon rejection of the suspect's procedural assertions does not, by that circumstance alone, permit the offense of violating the Patent Act to be found immediately in a criminal case; and that whether the involvement of a co-owner of a patent right in the practice of a patented invention may be regarded as the co-owner's own practice is not easy to determine even for legal experts, so that it

is difficult to conclude that the suspect, together with C, manufactured and sold the lighting cases with intent to infringe the patent."

4) Civil Actions on the Merits

In or around 2021, the Plaintiff brought actions against Nbits, Asca Korea, and C seeking damages on the ground that their manufacture and sale of lighting cases infringed the Plaintiff's patent right in Claim 4 and Claim 6 at Issue [Seoul Central District Court 2021GaHap533152 (Nbits); Seoul Central District Court 2021GaHap542835 (Asca Korea and C)]. The Seoul Central District Court rendered judgments recognizing, on the ground of patent infringement, an obligation to pay damages of KRW 90,000,000 on the part of Nbits and of KRW 30,000,000 jointly on the part of Asca Korea and C; the Plaintiff, Nbits, Asca Korea, and C each appealed, and the appeals are currently pending [IP High Court 2024Na10096 (Nbits); IP High Court 2024Na10034 (Asca Korea and C)].

[Factual basis] Undisputed facts; the statements in Plaintiff's Exhibits Nos. 1 through 3, 6, 7, 18, 21, 26, and 27 and in Defendant's Exhibits Nos. 7, 16, and 17 (where branch numbers exist, each includes its branch numbers; the same applies hereinafter); the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

1) The Defendant infringed the Plaintiff's patent right in Claims 4 and 6 at Issue by selling the Film at Issue to Nbits (hereinafter "First Infringing Act").

2) The Defendant infringed the Plaintiff's patent right in Claims 4 and 6 at Issue by selling, through online shopping malls and the like, Defendant's Products 1 and 2, which incorporate all elements of

Claim 4 at Issue, and the following products, which incorporate all elements of Claim 6 at Issue: Defendant's Products 1-1, 1-2, 1-4, 1-5, and 1-7; the "lighting cases" applied to the iPhone IP7 among Defendant's Product 1-3; and Defendant's Products 2-1 and 2-2 (hereinafter "Second Infringing Act").

3) The Plaintiff accordingly seeks from the Defendant payment of KRW 700,000,000 and delay damages thereon, as an explicit partial claim for damages.

B. The Defendant

1) Since January 2019, C has given appropriate direction and supervision to BQM and others with respect to the production of the Film at Issue and the lighting cases, so that this constitutes lawful practice by C himself; accordingly, the act of selling the Film at Issue so produced and the mobile phone cases incorporating the Film at Issue does not infringe the Patented Invention at Issue.

2) The Defendant has not produced the Defendant's Products further since receiving the quantity ordered in April 2019.

3) Claims 4 and 6 at Issue alone produce no more than the effect of light glittering unevenly on the back of a mobile phone case, and consumers decide to purchase by focusing on the character design of the lighting case; the contribution of Claims 4 and 6 at Issue must therefore be assessed as low.

3. Determination on the First Infringing Act

A. Whether the Patent Right Was Infringed

1) It is undisputed between the parties that the Film at Issue that the Defendant sold to Nbits includes all of the elements of Claims 4 and 6 at Issue.

2) According to the statements in Plaintiff's Exhibit No. 41 and the overall purport of the pleadings and oral arguments, Nbits was supplied with the Film at Issue from the Defendant in order to manufacture and directly sell lighting cases[2], and from around October 2017 to around March 2018 issued purchase tax invoices for items relating to "film," with the "Defendant" as supplier, in a total supply value of KRW 13,410,000, as set forth in the table below.

Date	Item	Total amount (KRW)	Supply value (KRW)	Quantity
December 31, 2017	Soft (jelly) film	1,892,000	1,720,000	2,457
January 31, 2018	Premium film and 7 other items	539,000	490,000	700
February 28, 2018	Soft (jelly) film and 60 other items	7,700,000	7,000,000	10,000
March 31, 2018	Soft (jelly) film and 108 other items	4,620,000	4,200,000	6,000
Total		14,751,000	13,410,000	19,157

3) The Defendant also acknowledges that, until March 2018, it sold the Film at Issue to Nbits to facilitate transactions (pages 1-2 of the Defendant's brief dated May 11, 2023).

4) That being so, the Defendant infringed the Plaintiff's patent right in Claims 4 and 6 at Issue by selling the Film at Issue to Nbits from around October 2017 to around March 2018, and the Defendant

2) In connection with both the First Infringing Act and the Second Infringing Act, Nbits was supplied with film and used it to manufacture lighting cases. In the case of the First Infringing Act, however, Nbits purchased the film from the Defendant in order to manufacture and sell lighting cases itself, whereas in the case of the Second Infringing Act, Nbits manufactured lighting cases with film supplied to it by the Defendant and delivered them back to the Defendant, that film having been supplied free of charge. The film with which Nbits was supplied in the First Infringing Act and in the Second Infringing Act is therefore distinct.

is therefore liable to compensate the Plaintiff for the damage caused by the First Infringing Act.

B. Determination on the Plaintiff's Assertion

The Plaintiff asserts in substance that, even from April 2018 onward, when the Defendant ordered from Nbits lighting cases that it would sell directly, it supplied the Film at Issue free of charge and sold film to Nbits only for products that Nbits would manufacture and sell directly, so that the quantity of the Film at Issue the Defendant sold to Nbits can be calculated from the number of lighting cases transferred by Nbits and Asca Korea.

However, according to the statements in Plaintiff's Exhibit No. 41 and Defendant's Exhibit No. 55, the transaction records between the Defendant and BQM relating to the Film at Issue can be confirmed only from October 31, 2017 to March 30, 2018, and there is no material from which to find that a transactional relationship existed thereafter; nor is there any objective material from which to find that the Defendant sold the Film at Issue to Nbits from April 2018 onward. In light of these points, it is insufficient to find that the Defendant sold the Film at Issue to Nbits from April 2018 onward as well, and there is no other evidence to support such a finding. The Plaintiff's assertion in this part is therefore without merit.

C. Scope of Damages

1) As discussed above, from around October 2017 to around March 2018 Nbits issued purchase tax invoices for items relating to "film," with the "Defendant" as supplier, in a total supply value of KRW 13,410,000.

2) It is either undisputed between the parties, or may be found from the statements in Plaintiff's Exhibits Nos. 44 and 47 together with the overall purport of the pleadings and oral arguments, that the

Defendant was supplied with the Film at Issue from BQM at KRW 500 per sheet and sold it to Nbits at KRW 700 per sheet.

3) According to the facts found above, the quantity of the Film at Issue that the Defendant sold to Nbits is 19,157 sheets (= supply value of KRW 13,410,000 ÷ unit selling price of KRW 700), and the Defendant's profit therefrom is KRW 3,831,400 [= 19,157 sheets sold × KRW 200 (= unit selling price to Nbits of KRW 700 − unit supply price from BQM of KRW 500)]. The Defendant's profit is presumed to be the amount of damage sustained by the patentee (Article 128(4) of the Patent Act), and since the Plaintiff's share in the patent right is 1/2, the Defendant is liable to pay the Plaintiff KRW 1,915,700 (= patentee's damage of KRW 3,831,400 × the Plaintiff's share of 1/2) and delay damages thereon as compensation for the First Infringing Act.

4. Determination on the Second Infringing Act

A. Whether the Patent Right Was Infringed

1) Whether the Defendant's Products Fall Within the Scope of Rights of Claims 4 and 6 at Issue

It is undisputed between the parties that Defendant's Products 1 and 2 include all of the elements of Claim 4 at Issue, and that Defendant's Products 1-1, 1-2, 1-4, 1-5, and 1-7, the "lighting cases" applied to the iPhone IP7 among Defendant's Product 1-3, and Defendant's Products 2-1 and 2-2 include all of the elements of Claim 6 at Issue.

2) The Beginning and End of the Defendant's Practice

A) The practice of a patented invention means, in the case of an invention of a product, the act of producing, using, transferring, leasing, or importing that product, or of offering to transfer or lease that product (including displaying it for transfer or lease) (Article 2, subparagraph 3 of the Patent Act).

B) Considering the following facts and circumstances, which are established by the evidence cited above, the statements in Plaintiff's Exhibits Nos. 31 and 53 and Defendant's Exhibits Nos. 30 and 31, and the overall purport of the pleadings and oral arguments — namely, ① that in or around September 2017 the Defendant sent a brochure containing the Defendant's Products to a Hong Kong company, and in or around October 2017 participated in the "Global Sourcing Fair" held in Hong Kong and exhibited the Defendant's Products, which may be regarded as practicing Claims 4 and 6 at Issue by way of an offer to transfer; and ② that the Defendant also acknowledges having manufactured and sold the Defendant's Products from around November 2017, and exported the Defendant's Products to Japan on or around November 1, 2017 — the Defendant may be regarded as having practiced Claims 4 and 6 at Issue from around October 2017, as the Plaintiff asserts.

C) Furthermore, in light of the following facts and circumstances, which are established by the evidence cited above, the statements in Plaintiff's Exhibits Nos. 29, 37, 38, 46, 55, 56, 68, and 76 and Defendant's Exhibit No. 25, the responses to this court's respective orders for production of documents addressed to Coupang Corp. and Naver Corporation, and the overall purport of the pleadings and oral arguments, the Defendant may be regarded as having been supplied with the Defendant's Products at least until "around May 2019," and as having practiced Claims 4 and 6 at Issue by transferring and selling those goods until "around December 2023," for which the Plaintiff seeks damages.

① The Defendant was supplied with the Defendant's Products from Nbits, Asca Korea, and C (KD Company) from October 2017 to May 2019, but no transaction records appear thereafter.

② The Defendant asserts that, as to the Defendant's Products sold after May 2019, various distributors had received delivery of them from the Defendant until around May 2019 and sold

them on online shopping malls thereafter. However, the product registration dates on which the various distributors registered the Defendant's Products for sale on online shopping malls vary, being "November 2019," "May 2023," and so forth, and the Defendant's Products continued to appear in search results on Coupang, Shinsegae, Naver Shopping, and Lotte ON even until around December 2023; in light of these points, it is difficult to find that those distributors continued to sell products delivered by the Defendant before May 2019.

③ Moreover, in the case of Coupang, records exist of a total of 14 Esther Bunny lighting cases sold from June 3, 2019 to May 13, 2023; and in the case of the Naver Smart Store, records exist of a total of 20 Esther Bunny lighting cases sold from June 7, 2019 to December 8, 2020.

④ From around October 2019 to around January 2021, the Plaintiff sent warning letters concerning patent infringement (Plaintiff's Exhibit No. 56) to lighting case manufacturers and distributors including the Defendant, BQM, and Nbits; in their replies, those companies merely asserted that the products had been lawfully delivered from C, a co-owner of the patent right, and did not assert to the effect that they were not currently selling them.

⑤ Even in or around December 2023, the Defendant posted the Defendant's Products on "NINE O' Clock," the Naver Smart Store it operates directly (Plaintiff's Exhibit No. 68).

3) Determination on the Defendant's Assertion

A) The Defendant's Assertion

The Defendant asserts that, after around January 2019, when C completed registration as a sole proprietor under the trade name "KD Company," it received delivery of the Defendant's Products from C; that C, as a co-owner of the patent right in Claims 4 and 6 at Issue, may practice the invention himself even without the Plaintiff's consent; and that the act of receiving delivery of the Defendant's Products from

C and selling them therefore does not infringe the Plaintiff's patent right.

B) Relevant Legal Principles

Where a patent right is jointly owned, each co-owner may, except as specially agreed by contract, practice the patented invention himself without obtaining the consent of the other co-owners (Article 99(3) of the Patent Act); however, to establish an exclusive license or grant a non-exclusive license in respect of that patent right, the consent of all the other co-owners must be obtained (Article 99(4) of the Patent Act). If the scope of a co-owner's own practice were construed too broadly, the distinction between Article 99(3) and Article 99(4) of the Patent Act would disappear and the rights of the other co-owners could be harmed; accordingly, where a co-owner does not directly practice the patented invention but has another person practice it, this may be regarded as the co-owner's own practice if the entire process of that practice was carried out on the co-owner's account and under the co-owner's direction and supervision.

C) Specific Determination

(1) Examining this, the following facts are either undisputed between the parties or found by taking together the statements in Plaintiff's Exhibits Nos. 46, 48, and 55 and Defendant's Exhibit No. 55 with the overall purport of the pleadings and oral arguments.

① Those involved in the production and sale of the Defendant's Products are BQM, which produced the Film at Issue; Nbits, which manufactured the lighting cases with that film; and the Defendant, Asca Korea, and C (KD Company), which sold those lighting cases.

② According to materials such as National Tax Service purchase-and-sale taxation information and tax invoices relating to those involved in the production and sale of the Defendant's Products, records show that from January 2019 to May 2019, C (KD Company) was supplied with the Film at Issue from BQM and with lighting

cases from Nbits, and sold them to the Defendant.

(2) However, in light of the following circumstances found by taking together the facts found above and the statements in Plaintiff's Exhibits Nos. 29, 46, 52, and 55 and Defendant's Exhibits Nos. 25, 34, and 35 with the overall purport of the pleadings and oral arguments, the facts so found alone are insufficient to establish that, after around January 2019, the entire process of producing and selling the lighting cases was carried out on C's account and under his direction and supervision, and there is no other evidence to support such a finding; the Defendant's assertion is therefore difficult to accept.

① The transaction structure for the Defendant's Products from October 2017 to March 2018 was one in which the Defendant commissioned BQM to produce the Film at Issue and received delivery of it, and upon supplying that film to Nbits, Nbits used it to manufacture lighting cases and delivered them to the Defendant. Moreover, Nbits did not merely deliver lighting cases to the Defendant but also sold them directly. That being so, the Defendant and Nbits appear to have led the production and sale of the Defendant's Products.

② In the Preliminary Injunction case at issue, the Defendant asserted in substance that "since transactions had been conducted through Asca Korea, in which C holds a 100% stake, it was considered that no patent infringement arose because this was C's own practice. However, since an issue might remain as to the goods transacted in the name of Asca Korea rather than C, it was decided to retroactively change the transactions to those conducted under C's name, and the Defendant returned to Asca Korea the Defendant's Products previously delivered in the name of Asca Korea and had them supplied again in C's name, thereby changing the name provided in the various documents such as purchase orders, tax invoices, and transaction statements from Asca Korea to C (Plaintiff's Exhibit No. 29, pages 1-2)." That being so, the existing transaction records between the Defendant and Asca Korea appear to have been changed

into transaction records between the Defendant and C.

③ Under the transaction structure asserted by the Defendant, it should be that C commissions BQM to produce the Film at Issue and receives delivery of it; upon supplying that film to Nbits, Nbits uses it to manufacture lighting cases and delivers them to C; and C then sells them to the Defendant. According to the tax invoices (Plaintiff's Exhibits Nos. 46 and 55; Defendant's Exhibit No. 25), it does appear that from around January 2019 to around May 2019 the Defendant's Products manufactured by Nbits were delivered to the Defendant via C, as set forth in the table below.

Date	Party	Amount (KRW)	Party	Amount (KRW)
January 31, 2019	Nbits → C	21,698,600	C → Defendant[3]	27,886,100
February 22, 2019	Nbits → C	63,597,765	C → Defendant	65,725,803
March 1, 2019	Nbits → C	3,630,550	C → Defendant	4,769,050
March 31, 2019	Nbits → C	3,611,300	C → Defendant	4,700,300
April 30, 2019	Nbits → C	1,001,000	C → Defendant	1,298,000
May 31, 2019	Nbits → C	6,397,006	C → Defendant	8,271,076

However, the transaction of February 22, 2019 between Nbits and C was one in which Nbits newly issued a tax invoice for that portion in the course of changing the arrangement so that the Defendant's Products previously delivered to the Defendant from Asca Korea were returned and then supplied again in C's name (Plaintiff's Exhibit No. 29, pages 4-5; Plaintiff's Exhibit No. 29 states amounts on a supply-value basis). Furthermore, the total transaction amount on the tax invoices for the remaining transactions between Nbits and C is KRW 36,338,456 (= KRW 21,698,600 + KRW 3,630,550 + KRW 3,611,300 + KRW 1,001,000 + KRW 6,397,006); and it appears that Nbits cancelled the transactions for those sales by issuing a negative tax invoice of

3) According to the taxation information, the date of preparation of the tax invoice for the above transaction record is "April 23, 2019" (Plaintiff's Exhibit No. 55), whereas the handwritten tax invoice states the date of preparation as "January 31, 2019" (Defendant's Exhibit No. 25).

"－KRW 36,338,456" on April 3, 2020 (Plaintiff's Exhibit No. 55, page 3). That being so, it is difficult to find that C received the Defendant's Products from Nbits and supplied them to the Defendant.

④ The Defendant submitted e-mails sent by C between April 10, 2019 and April 22, 2019 as evidence confirming that C directed and supervised Nbits and the Defendant (Defendant's Exhibits Nos. 34 and 35); however, all of those e-mails were written after April 1, 2019, when the preliminary injunction was issued, and even according to their contents they concern only a very small part of the transactions relating to the lighting cases, so that this evidence alone makes it difficult to find that C directed and supervised the Defendant, BQM, Nbits, and others throughout the entire process of manufacturing and selling the lighting cases. Nor is there any material from which to find that the revenue generated throughout the entire process of producing and selling the Defendant's Products accrued to C.

⑤ Taking the foregoing together, it appears that, with the basic transactional relationship in which the Defendant and Nbits led the production of the Defendant's Products remaining unchanged, C was merely paid royalties, in consideration of having granted the Defendant and Nbits a license to practice the Patented Invention at Issue, by way of receiving the transaction margin arising at the intermediate stage of the transactions between Nbits and the Defendant, as shown in the table above provided under ③.

4) Sub-conclusion

The Defendant infringed the Plaintiff's patent right in Claims 4 and 6 at Issue by practicing those inventions from October 2017 to December 2023, including by producing and selling the Defendant's Products. The Defendant is therefore liable to compensate the Plaintiff for the damage caused by the patent infringement.

B. Scope of Damages

1) The Plaintiff's Assertion

The Defendant failed, without justifiable grounds, to comply with the orders of the court of first instance and of this court to submit materials, and it is difficult to expect the facts asserted by the Plaintiff to be proved by other evidence; accordingly, under Article 132(4) and (5) of the Patent Act, the period and quantity of infringement asserted by the Plaintiff as set forth in Appendix 2 should be found to be true. Moreover, the Defendant's acts of patent infringement were willful, so that Article 128(8) of the Patent Act should apply to the period from August 2019 to December 2023.

As set forth in the table below, the Defendant transferred a total of 802,560 units of the Defendant's Products from around October 2017 to around December 2023; the "profit per unit" of the goods that the Plaintiff could have sold but for the Defendant's infringing acts is KRW 9,310 (= KRW 16,250, the median wholesale price of the Plaintiff's products, − manufacturing cost of KRW 6,940); and the contribution of the Patented Invention at Issue is at least 95%. The Defendant is therefore liable to pay the Plaintiff a total of KRW 7,047,598,313 in damages.

	October 2017 – March 2018	April 2018 – December 2018	January 2019 – July 2019	Application of Article 128(8) of the Patent Act		Remarks
				August 2019 – December 2020	January 2021 – December 2023	
Quantity (units)	131,911	66,577	208,518	10,318	385,236	802,560
Profit per unit (KRW)	9,310					
Plaintiff's damage (KRW)	1,799,882,284			1,749,238,677		Infringing quantity × profit per unit × 0.95 × 0.5

	October 2017 – March 2018	April 2018 – December 2018	January 2019 – July 2019	Application of Article 128(8) of the Patent Act		Remarks
				August 2019 – December 2020	January 2021 – December 2023	
Punitive damages (KRW)	0			5,247,716,030		Threefold multiplier applied
Total (KRW)	7,047,598,313					

2) Whether the Amount of Damage May Be Found Under Article 128(2) of the Patent Act

A) Considering the following circumstances found from the statements in Plaintiff's Exhibit No. 49 and Defendant's Exhibits Nos. 8, 13, 24, 27 through 33, 35, 45, 56 through 60, and 81, the responses to this court's respective orders for production of documents addressed to Coupang Corp. and Naver Corporation, and the overall purport of the pleadings and oral arguments, the evidence submitted by the Plaintiff alone makes it difficult to accept the transferred quantity of the Defendant's Products and the profit per unit asserted by the Plaintiff.

(1) The transferred quantity of 802,560 of the Defendant's Products

① The Plaintiff calculates the amount of damage on the premise that the Defendant's Products continued to be produced from October 2017 to December 2023. However, as discussed above, the Defendant's Products were produced only until around May 2019, and thereafter it appears that previously produced stock was sold; the amount of damage cannot therefore be calculated on the premise that the Defendant's Products were produced from June 2019 to December 2023.

② As set forth in Appendix 2, the Plaintiff also treats items whose description is entered as "goods payment" as transactions relating to lighting cases in calculating the amount of damage. However,

in transacting with Nbits, the Defendant had dealt in a variety of goods including not only the Defendant's Products but also mold costs, card slots, and mobile phone accessories (Plaintiff's Exhibit No. 49; Defendant's Exhibits Nos. 56 through 60); it is therefore difficult to regard items that are not specified as "lighting case," "mobile phone case," or the like but are simply entered as "goods payment" as being related to the Defendant's Products.

③ The Plaintiff calculated 39.7% as the proportion accounted for by the Defendant's Products out of total purchases relating to cases (mobile phone accessories) during the period from October 2017 to March 2018; however, as discussed above, that figure includes mobile phone cases other than the Defendant's Products, and there is no basis for regarding that proportion as applying identically through December 2023. Rather, the smartphone models to which the group of the Defendant's Products was applied are products released before May 2019, and the Defendant's Products have not been used on smartphone models released thereafter, so that the sales proportion of the Defendant's Products would be expected to decline with the passage of time. In fact, the Esther Bunny lighting cases sold on Coupang and the Naver Smart Store from around May 2019 to around December 2023 amount to only about 48 units in total.

④ The Plaintiff asserts that, because the Defendant failed, both in the court of first instance and this court, to comply with the courts' orders for submission of materials, its assertions as to the infringing quantity should be found to be true under Article 132(4) and (5) of the Patent Act. However, taking together such points as: ⓐ that the court of first instance and this court ordered the submission of transaction records relating to the Defendant's Products (purchase orders, transaction statements, and the like), and the Defendant complied with those orders for material submission or voluntarily submitted, as Defendant's Exhibits Nos. 8, 13, 24, 27 through 33, 35, 45, 58, 59, and 81, purchase order records, tax invoices, transaction statements,

income statements, and the like from which the transaction records between the Defendant and BQM, Nbits, Asca Korea, and C (KD Company) may be confirmed; ⓑ that, as discussed below, the transferred quantity of the Defendant's Products can be estimated on the basis of the response to the court of first instance's order to submit taxation information addressed to the Yeongdeungpo District Tax Office (Plaintiff's Exhibit No. 49) and the materials submitted by the Defendant; and ⓒ that, although the Plaintiff makes the above assertion on the premise that the Defendant's Products were produced from October 2017 to December 2023, as discussed above, there are no transaction records between the Defendant and Nbits, Asca Korea, or C (KD Company) after May 2019, which makes it difficult to find that the Defendant's Products were produced after that — the Plaintiff's assertion is difficult to accept.

(2) KRW 9,310 profit per unit

The profit per unit quantity of the Plaintiff's product of KRW 9,310 asserted by the Plaintiff is the amount obtained by deducting a manufacturing cost of KRW 5,585 and additional management costs per unit of KRW 1,355 from KRW 16,250, the median of the wholesale selling price of the Plaintiff's product (KRW 14,500 to KRW 18,000), and the above manufacturing cost and additional management costs per unit are based on materials prepared by the Plaintiff.

However, the additional management costs per unit of KRW 1,355 were calculated by dividing KRW 1,677,257,023 — the aggregate of mold costs, labor costs, and office rental costs borne by the Plaintiff from 2017 to 2023 — by 1,238,174 units[4], the quantity that the Plaintiff asserts the Defendant would have transferred from 2017 to 2023; not only is there no basis for regarding the amount so calculated as the additional management costs required to sell one unit of the

4) This differs from the Defendant's transferred quantity of 802,560 units asserted by the Plaintiff before this court.

Plaintiff's product, but, as discussed above, the Defendant's Products have not been produced since May 2019, so that the transferred quantity asserted by the Plaintiff cannot be recognized either.

The profit per unit quantity asserted by the Plaintiff is therefore difficult to accept as it stands.

B) In the end, the nature of this case makes it extremely difficult to prove the amount of damage under Article 128(2) of the Patent Act; accordingly, under Article 128(7) of the Patent Act, a reasonable amount of damage may be found on the basis of the overall purport of the pleadings and oral arguments and the results of the examination of evidence.

3) Calculation of the Amount of Damage Under Article 128(7) of the Patent Act

Considering the following facts and circumstances, which are established by the statements in Plaintiff's Exhibits Nos. 1, 21, 30, 49, 50, 54, 61, and 62 and Defendant's Exhibits Nos. 13, 15, 24 through 27, and 56 through 60 and the overall purport of the pleadings and oral arguments, the amount of the Plaintiff's damage caused by the Second Infringing Act is fixed at KRW 350,000,000.

A) As discussed above, the Defendant was supplied with the Defendant's Products from Nbits, Asca Korea, and C (KD Company) from October 2017 to May 2019, and practiced Claims 4 and 6 at Issue by transferring and selling those goods until around December 2023, the period for which the Plaintiff seeks damages. As discussed below, the quantity delivered to the Defendant from Nbits, Asca Korea, and C (KD Company) may be estimated at 157,953 units in total.

(1) From October 2017 to March 2018: 103,968 units

(a) As set forth in the table below, on the basis of the Defendant's purchase tax information (Plaintiff's Exhibit No. 49), the

amounts for transactions during the period from October 2017 to March 2018 in which the supplier was Nbits and the item description relates to lighting cases may be calculated. Dividing those transaction amounts by the Nbits unit supply price of KRW 3,157 (Plaintiff's Exhibit No. 61; amount including value-added tax[5]) yields the number of lighting case products supplied to the Defendant by Nbits, which is 95,795 units.[6]

[Quantity purchased by the Defendant from Nbits]

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
December 29, 2017	January 10, 2018	Nbits	2,657,540	Zero rate[7]	841
December 29, 2017	January 10, 2018	Nbits	178,451,317	iPhone X Premium Landmark Light-Up Case	56,525
January 31, 2018	February 12, 2018	Nbits	121,320,837	Nine O'Clock iPhone 6 Lighting Over Action Rabbit	38,429
Total					95,795

(b) As set forth in the table below, on the basis of the Defendant's purchase tax information and transaction statements (Plaintiff's Exhibit No. 49; Defendant's Exhibits Nos. 13 and 24), the amounts for transactions during the period from October 2017 to March 2018 in which the supplier was Asca Korea and the item description relates to lighting cases may be calculated. Dividing those transaction amounts by the Asca Korea unit supply price of KRW 4,147 (Defendant's Exhibit No. 27; amount including value-added tax[8]))

5) The amount before value-added tax is KRW 2,870.

6) Items whose description is entered simply as "goods payment" are difficult to regard as relating to the Defendant's Products, and such items have therefore been excluded from the portions set forth in Appendix 2. The same applies hereinafter.

7) These are records of the Defendant's exports of lighting cases (Defendant's Exhibit No. 33).

8) The amount before value-added tax is KRW 3,770. This is the unit supply price of the lighting cases supplied by C (KD Company); it appears that Asca Korea, of which C is the representative director, would have supplied them at the same price (this is consistent with the fact that the transaction records of Asca

yields the number of lighting case products supplied to the Defendant by Asca Korea, which is 11,673 units.

[Quantity purchased by the Defendant from Asca Korea]

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
January 31, 2018	October 25, 2018	Asca Korea	26,706,680	Mobile phone accessories	6,440
February 28, 2018	October 25, 2018	Asca Korea	4,561,700	Mobile phone accessories	1,100
March 31, 2018	April 6, 2018	Asca Korea	6,938,360	Mobile phone accessories	1,673
March 31, 2018	October 25, 2018	Asca Korea	10,201,620	Cell phone accessories	2,460
Total					**11,673**

Against this, the Defendant asserts that goods other than lighting cases were also transacted with Asca Korea, so that the entirety of the above quantity should not be recognized. However, the material that the Defendant submitted, pursuant to the order to produce documents of the court of first instance, as the transaction records for lighting cases with Asca Korea is the tax invoices constituting Defendant's Exhibit No. 13; the amounts stated in those tax invoices coincide with the amounts set forth in the table above, and the Defendant's own statement of evidence describes Defendant's Exhibit No. 13 as "tax invoices and transaction statements relating to the transaction records by which Asca Korea transferred lighting cases to the Defendant" (see page 43 of the Defendant's comprehensive brief dated January 15, 2025). Furthermore, the item description in the transaction statements submitted in connection with those transactions (Defendant's Exhibit No. 24) expressly reads "lighting case." The Defendant's above assertion is therefore difficult to accept.

(c) During the period from October 2017 to March 2018, the Defendant supplied to Nbits part of the lighting cases with which it had been supplied as described above, and, as set forth in the table below, the corresponding transaction amounts may be calculated on the basis of Nbits' purchase tax information (Plaintiff's Exhibit No. 50).

Korea were changed into transaction records of C).

Dividing those transaction amounts by the Defendant's unit supply price of KRW 4,290 (Plaintiff's Exhibit No. 54-1; amount including value-added tax) yields the number of lighting case products supplied by the Defendant to Nbits, which is 3,500 units.

[Quantity sold by the Defendant to Nbits]

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
January 31, 2018	October 23, 2018	Defendant	1,501,500	Mobile phone case	350
February 28, 2018	October 23, 2018	Defendant	4,719,000	Mobile phone case	1,100
March 31, 2018	October 23, 2018	Defendant	8,794,500	Mobile phone case	2,050
Total					**3,500**

(d) Since the Defendant supplied to Nbits part of the lighting case products with which it had been supplied by Nbits and Asca Korea as described above, the transferred quantity of the Defendant's Products must be calculated as the number of products remaining after deducting the lighting case products sold by the Defendant to Nbits from the lighting case products supplied to the Defendant by Nbits and Asca Korea. On that basis, the transferred quantity of the Defendant's Products from October 2017 to March 2018 comes to a total of 103,968 units (= 95,795 units + 11,673 units − 3,500 units).

(2) From April 2018 to December 2018: 51,792 units

(a) As set forth in the table below, on the basis of the Defendant's purchase tax information (Plaintiff's Exhibit No. 49), the amounts for transactions during the period from April 2018 to December 2018 in which the supplier was Nbits and the item description relates to mobile phone cases may be calculated. However, the Defendant received delivery from Nbits of not only the Defendant's Products but also a variety of cell phone accessory products such as card slots and cell phone cases (Defendant's Exhibits Nos. 56, 57, and 60), so that it is difficult to regard all of those transaction amounts as amounts relating to the Defendant's Products. That said, in the transaction records between the Defendant and Nbits from October 2017 to March 2018 discussed above, the items specified as "lighting

case" account for about 30% of the entire transaction records, so that about 30% of the transaction amounts relating to the above cell phone cases may be regarded as amounts pertaining to the Defendant's Products. Dividing the amount so calculated by the Nbits unit supply price of KRW 3,157 yields an estimated number of lighting case products supplied to the Defendant by Nbits, which is 20,036 units.

[Quantity purchased by the Defendant from Nbits]

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
October 31, 2018	November 12, 2018	Nbits	45,340,680	Cell phone case	4,308
November 30, 2018	December 10, 2018	Nbits	93,852,473	Cell phone case	8,918
December 31, 2018	January 9, 2019	Nbits	71,666,870	Cell phone case	6,810
Total					**20,036**

(b) As set forth in the table below, on the basis of the Defendant's purchase tax information (Plaintiff's Exhibit No. 49; Defendant's Exhibits Nos. 13 and 24), the amounts for transactions during the period from April 2018 to December 2018 in which the supplier was Asca Korea and the item description relates to lighting cases may be calculated. Dividing those transaction amounts by the Asca Korea unit supply price of KRW 4,147 yields the number of lighting case products supplied to the Defendant by Asca Korea, which is 50,171 units.

[Quantity purchased by the Defendant from Asca Korea]

NO	Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
1	April 30, 2018	May 10, 2018	Asca Korea	1,440,120	Cell phone accessories	347
2	April 30, 2018	July 10, 2018	Asca Korea	85,017,647	Cell phone case	20,501
3	May 31, 2018	July 10, 2018	Asca Korea	42,971,214	Cell phone case	10,362
4	June 30, 2018	July 10, 2018	Asca Korea	36,228,192	Cell phone case	8,736
5	August 31, 2018	September 10, 2018	Asca Korea	21,958,365	Cell phone accessories	5,295
6	October 10, 2018	October 10, 2018	Asca Korea	20,444,710	Cell phone accessories	4,930
	Total					**50,171**

Against this, the Defendant asserts that goods other than lighting cases were also transacted with Asca Korea, so that the entirety of the above quantity should not be recognized; however, that assertion is difficult to accept for the same reasons as discussed above.

(c) During the period from April 2018 to December 2018, the Defendant supplied to Nbits part of the lighting cases with which it had been supplied as described above, and, as set forth in the table below, the corresponding transaction amounts may be calculated on the basis of Nbits' purchase tax information (Plaintiff's Exhibit No. 50). Dividing those transaction amounts by the Defendant's unit supply price of KRW 4,290 yields the number of lighting case products supplied by the Defendant to Nbits, which is 18,415 units.

[Quantity sold by the Defendant to Nbits]

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
180431	180710	Defendant	21,664,500	Mobile phone case	5,050
180531	180710	Defendant	12,441,000	Mobile phone case	2,900
180630	180710	Defendant	23,745,150	Mobile phone case	5,535
180930	181010	Defendant	21,149,700	(Kakao Friends) Kakao Lighting Case and 71 other items	4,930
Total					**18,415**

(d) Since the Defendant supplied to Nbits part of the lighting case products with which it had been supplied by Nbits and Asca Korea as described above, the transferred quantity of the Defendant's Products must be calculated as the number of products remaining after deducting the number of lighting cases sold by the Defendant to Nbits from the number of lighting cases supplied to the Defendant by Nbits and Asca Korea. On that basis, the transferred quantity of the Defendant's Products from April 2018 to December 2018 comes to a total of 51,792 units (= 20,036 units + 50,171 units − 18,415 units).

(3) From January 2019 to May 2019: 2,193 units

During the above period, the Defendant was supplied by C (KD Company) with lighting cases totaling 2,193 units — 300 units in or around April 2019 and 1,893 units in or around May 2019 [in its brief dated May 11, 2023 the Defendant asserted that the quantity with which it had been supplied by C (KD Company) was 174,560 units[9]; however, according to the statements in Defendant's Exhibits Nos. 25 through 27, it is clear that the quantity with which the Defendant was supplied by C (KD Company) is 2,193 units, and it may therefore be found that the Defendant's above statement was inaccurate and made by mistake. Before this court the Defendant asserts, on the basis of the evidence so submitted, that the figure is 2,193 units].

B) As discussed below, the price of lighting case products to which Claims 4 and 6 at Issue were applied is at least KRW 9,000 higher than that of other ordinary mobile phone cases, and the above inventions appear to have made a substantial contribution to the formation of such a price; taking together the relative importance of the Film at Issue within the lighting case and consumer preferences for the characters displayed on mobile phone cases, it is reasonable to regard Claims 4 and 6 at Issue as having contributed at least one half of that price difference.

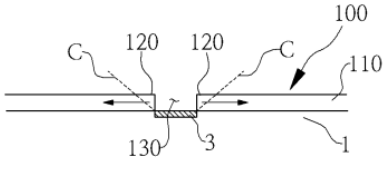
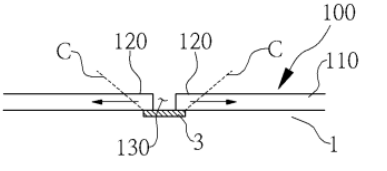
(1) The Plaintiff engaged in both wholesale and retail business; as of around December 2017 the wholesale price of the Plaintiff's product was KRW 14,500 to KRW 18,000, and its retail price was KRW 29,800 to KRW 38,800 (Plaintiff's Exhibit No. 62). Since ordinary mobile phone cases displaying only a character without any light-emitting effect were being sold at KRW 11,800 (Defendant's Exhibit No. 15), on a retail-price basis the Plaintiff's product appears to have been sold at least KRW 18,000 higher than ordinary mobile phone cases; and given that the wholesale price is about one half of

9) See page 7 of the Defendant's brief dated May 11, 2023.

the retail price, it may be estimated that the wholesale price was about KRW 9,000 higher.

(2) The most significant feature distinguishing the Defendant's Products from other mobile phone cases is that they emit light through the mobile phone skin built into the case. The online shopping malls selling the Defendant's Products likewise emphasize the light-emitting effect by carrying phrases such as "a light-up case that sparkles when a call or text arrives," or by showing comparative photographs before and after light emission (Plaintiff's Exhibits Nos. 21 and 30).

Such a function, however, pertains to the practice of Claims 4 and 6 at Issue: the technical problem addressed by the Patented Invention at Issue is "to provide a skin that enables light-emitting expression without any separate complex configuration by utilizing the camera flash of a mobile phone (paragraph [0005])," and to that end the Patented Invention at Issue adopts methods such as positioning the "light incidence portion" of the mobile phone skin so as to span the main light region of the flash [Fig. 8(b)], or positioning the mobile phone skin so as to overlap part of the upper surface of the flash [Fig. 8(c)], as shown below, so that part of the main light of the flash is incident through the light incidence portion and the light spreads throughout the entire mobile phone skin as indicated by the arrows (paragraphs [0043]-[0047]).

Fig. 8(b)	Fig. 8(c)
	

In light of the foregoing, in order to make a mobile phone case that emits light using the flash with a mobile phone skin alone and without adding any separate configuration, the practice of Claim 4 or Claim 6 at Issue is necessary.

(3) As discussed above, the Defendant was supplied with

the Film at Issue from BQM at KRW 500 and provided it to Nbits, and was supplied with the lighting cases manufactured by Nbits at KRW 3,157; the proportion accounted for by that film within the total manufacturing cost of a lighting case is therefore about 16%.

(4) The Plaintiff and the Defendant were selling lighting case products designed with different characters, so that preferences for each character appear to have had some influence on purchasing decisions regarding the Plaintiff's product and the Defendant's Products.

C) On that basis, the quantity of the Defendant's Products transferred by the Defendant is estimated at 157,953 units; the Defendant's Products are at least KRW 9,000 more expensive than products to which Claims 4 and 6 at Issue are not applied, of which difference about one half may be regarded as attributable to the contribution of those inventions; and the Plaintiff's share in those inventions is 1/2. It is therefore reasonable to regard the Plaintiff as having sustained damage of at least KRW 350,000,000.

4) Whether Article 128(8) of the Patent Act Applies

The Plaintiff asserts that, because the Defendant committed willful acts of infringement, under Article 128(8) of the Patent Act the Defendant is liable to pay damages up to three times the amount, for the damage arising after July 2019.

Article 128(8) of the Patent Act provides that "where an act of infringing another person's patent right or exclusive license is found to be willful, notwithstanding paragraph (1), the amount of compensation may be fixed within a range not exceeding three times the amount found as damage under paragraphs (2) through (7)." Article 3 of the Addenda to the Patent Act (Act No. 16208, January 8, 2019) provides that "the amended provisions of Article 128(8) shall apply from the first violation occurring after this Act enters into force," and Article 128(8) of the Patent Act took effect on July 9, 2019.

Under Article 3 of the above Addenda to the Patent Act, Article 128(8) of the Patent Act may be applied from "the first violation occurring" after July 9, 2019; however, as discussed above, the acts of infringing the patent right in Claims 4 and 6 at Issue appear to have continued from around October 2017 to around December 2023 pursuant to a single, continuing intent on the part of the Defendant, so that it is difficult to regard this as a case in which a violation first occurred after July 9, 2019.

Furthermore, in light of the following circumstances—namely, ① that, as discussed above, in or around October 2017 the Defendant produced and sold the Defendant's Products under a license from C, a co-owner of the Patented Invention at Issue, and it appears that the Defendant conducted the transactions on the understanding that no particular problem would arise because they were authorized by a patentee; ② that thereafter, when the Plaintiff applied for the Preliminary Injunction at Issue, it became a matter of contention whether such transactions constituted C's own practice, and it appears that, in order to have them assessed as acts of a co-owner's own practice, the transaction structure was changed to a form in which Asca Korea, of which C is the representative director, or C himself was involved in the manufacture and sale of the Defendant's Products; ③ that whether conduct constitutes a co-owner's own practice of a patent right is a matter of legal evaluation, determined on the basis of the relevant evidence, as to whether the entire process of that practice was carried out on the co-owner's account and under his direction and supervision, and is not easy even for legal experts to determine; and ④ that, as discussed above, since May 2019 the Defendant has not been provided with the Defendant's Products by Nbits, Asca Korea, or C (KD Company), and the sales quantity of the Defendant's Products sold thereafter is likewise only small — it is also difficult to conclude that the Defendant's acts of infringing the patent right were willful.

The Plaintiff's assertion in this part is therefore without merit in

every respect.

5. Conclusion

Accordingly, the Defendant is liable to pay the Plaintiff, as damages for patent infringement, KRW 351,915,700 (damages for the First Infringing Act of KRW 1,915,700 + damages for the Second Infringing Act of KRW 350,000,000), together with delay damages calculated as follows: on KRW 101,915,700 thereof, being the portion accepted by the judgment of the first instance, the amount calculated at the rate of 5% per annum prescribed by the Civil Act from August 6, 2021, the day following the date of service of a copy of the complaint in this case, which the Plaintiff seeks and which is after the date of the Defendant's infringement of the patent right at issue, until September 15, 2023, the date of pronouncement of the judgment of the first instance, up to which it is deemed reasonable for the Defendant to dispute the existence or scope of its obligation to perform; and, of the damages for the Second Infringing Act additionally ordered to be paid by this court, on KRW 48,084,300[10] thereof from August 6, 2021, the day following the date of service of a copy of the complaint in this case; and on the remaining KRW 201,915,700[11] from July 5, 2023, the day following the date of service of the application dated July 3, 2023 to amend the demand for relief, in each case the amount calculated at the rate of 5% per annum until May 28, 2025, the date of pronouncement of the judgment of this court, up to which it is deemed reasonable for the Defendant to dispute the existence or scope of its obligation to perform, and at the rate of 12% per annum from the following day until full payment.

---

10) The portion of the KRW 150,000,000 sought by the Plaintiff in the complaint that exceeds the amount accepted by the judgment of the first instance (KRW 101,915,700).

11) The portion of the KRW 250,000,000 additionally accepted by this court, excluding KRW 48,084,300.

Accordingly, the Plaintiff's claim is well-founded within the scope so recognized and is therefore granted, and the remainder of the claim is without merit and is therefore dismissed. The judgment of the first instance, which reached a partly different conclusion, is partly reversed, and the remainder of the Plaintiff's appeal and the Defendant's appeal are all dismissed. The court renders its decision as set forth in the Order.

Presiding	Judge	Hyejin LEE
	Judge	Eunhee PARK
	Judge	Wonmyeong KWON

[Appendix 2]

Transferred Quantity of the Defendant's Products Asserted by the Plaintiff

1. Transferred quantity of the Defendant's Products from October 2017 to March 2018: 131,911 units

A. Quantity purchased by the Defendant from Nbits: 123,738 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
December 29, 2017	January 10, 2018	Nbits	2,657,540	Zero rate	926
December 29, 2017	January 10, 2018	Nbits	178,451,317	iPhone X Premium Landmark Light-Up Case	56,526
January 31, 2018	February 12, 2018	Nbits	121,320,837	Nine O'Clock iPhone 6 Lighting Over Action Rabbit	38,429
March 31, 2018	April 10, 2018	Nbits	221,525,348	March goods payment	27,857
Total					**123,738**

B. Quantity purchased by the Defendant from Asca Korea: 11,673 units

NO	Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
1	January 31, 2018	October 25, 2018	Asca Korea	26,706,680	Mobile phone accessories	6,440
2	January 31, 2018	October 25, 2018	Asca Korea	6,706,680	Mobile phone accessories	6,440
3	January 31, 2018	October 25, 2018	Asca Korea	-26,706,680	Mobile phone accessories	-6,440
4	February 28, 2018	October 25, 2018	Asca Korea	4,561,700	Mobile phone accessories	1,100
5	March 31, 2018	April 6, 2018	Asca Korea	6,938,360	Mobile phone accessories	1,673
6	March 31, 2018	October 25, 2018	Asca Korea	10,201,620	Cell phone accessories	2,460
	Total					**11,673**

C. Quantity sold by the Defendant to Nbits: 3,500 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
180131	181023	Defendant	1,501,500	Mobile phone case	350
180228	181023	Defendant	4,719,000	Mobile phone case	1,100
180331	181023	Defendant	8,794,500	Mobile phone case	2,050
Total					**3,500**

2. Transferred quantity of the Defendant's Products from April 2018 to December 2018: 66,577 units

A. Quantity purchased by the Defendant from Nbits: 34,821 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
June 30, 2018	July 10, 2018	Nbits	66,270,655	June goods payment and others	8,334
October 31, 2018	November 12, 2018	Nbits	45,340,680	Cell phone case	5,673
November 30, 2018	December 10, 2018	Nbits	93,852,473	Cell phone case	11,802
December 31, 2018	January 9, 2019	Nbits	71,666,870	Cell phone case	9,012
Total					**34,821**

B. Quantity purchased by the Defendant from Asca Korea: 50,171 units

NO	Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
1	April 30, 2018	May 10, 2018	Asca Korea	1,440,120	Cell phone accessories	347
2	April 30, 2018	July 10, 2018	Asca Korea	85,017,647	Cell phone case	20,501
3	May 31, 2018	July 10, 2018	Asca Korea	42,971,214	Cell phone case	10,362
4	June 30, 2018	July 10, 2018	Asca Korea	36,228,192	Cell phone case	8,736
5	August 31, 2018	September 10, 2018	Asca Korea	21,958,365	Cell phone accessories	5,295
6	October 10, 2018	October 10, 2018	Asca Korea	20,444,710	Cell phone accessories	4,930
	Total					**50,171**

C. Quantity sold by the Defendant to Nbits: 18,415 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
180431	180710	Defendant	21,664,500	Mobile phone case	5,050
180531	180710	Defendant	12,441,000	Mobile phone case	2,900
180630	180710	Defendant	23,745,150	Mobile phone case	5,535
180930	181010	Defendant	21,149,700	(Kakao Friends) Kakao Lighting Case and 71 other items	4,930
Total					**18,415**

3. Transferred quantity of the Defendant's Products from January 2019 to July 2019: 208,518 units

A. Quantity purchased by the Defendant from Nbits: 42,458 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
January 31, 2019	February 11, 2019	Nbits	67,045,957	January goods payment	8,431
February 28, 2019	March 8, 2019	Nbits	31,696,863	February goods payment	3,986
March 31, 2019	April 1, 2019	Nbits	60,103,045	March goods payment	7,558
March 31, 2019	April 9, 2019	Nbits	-390,997	March goods payment	-49
April 30, 2019	May 10, 2019	Nbits	76,635,757	April goods payment	9,637
May 31, 2019	June 10, 2019	Nbits	34,623,765	May goods payment	4,354
June 30, 2019	July 8, 2019	Nbits	42,574,873	June goods payment	5,354
July 31, 2019	August 8, 2019	Nbits	25,344,341	Goods payment	3,187
Total					**42,458**

B. Quantity purchased by the Defendant from KD Company: 174,560 units

The quantity that the Defendant admitted having been supplied with by KD Company during the period from January 2019 to May 2019 (page 7 of the Defendant's brief dated May 11, 2023)

C. Quantity sold by the Defendant to Nbits: 8,500 units

4. Transferred quantity of the Defendant's Products from August 2019 to December 2020: 10,318 units

Quantity purchased by the Defendant from Nbits: 10,318 units

Date of preparation	Date of issuance	Supplier	Amount (KRW)	Item	Quantity
August 30, 2019	September 9, 2019	Nbits	4,898,278	Goods payment	616
September 30, 2019	October 4, 2019	Nbits	17,950,658	September goods payment	2,257
October 31, 2019	November 11, 2019	Nbits	19,412,063	October goods payment	2,441
November 30, 2019	December 10, 2019	Nbits	8,343,130	November goods payment	1,049
December 31, 2019	January 10, 2020	Nbits	831,919	December goods payment	105
January 31, 2020	February 10, 2020	Nbits	3,221,460	January goods payment	405
February 29, 2020	March 9, 2020	Nbits	7,341,759	February goods payment	923
March 31, 2020	April 8, 2020	Nbits	3,001,735	March goods payment	377
May 31, 2020	June 10, 2020	Nbits	2,667,500	May goods payment	335
June 30, 2020	July 10, 2020	Nbits	2,117,280	June goods payment	266
August 31, 2020	September 10, 2020	Nbits	3,873,760	August goods payment	487
September 29, 2020	October 12, 2020	Nbits	2,502,000	September goods payment	315
October 1, 2020	October 30, 2020	Nbits	2,502,500	Goods payment	315
October 1, 2020	November 13, 2020	Nbits	-2,502,500	Goods payment	-315
October 31, 2020	November 9, 2020	Nbits	3,003,000	October goods payment	378
December 31, 2020	January 11, 2021	Nbits	2,887,500	December goods payment	363
Total					**10,318**

5. Transferred quantity of the Defendant's Products from January 2021 to December 2023: 385,236 units

The quantity estimated by dividing the infringing quantity from October 2017 to December 2020 by the infringement period (39 months) to obtain the monthly average infringing quantity[12], and then multiplying that quantity by the number of months in the relevant period (36 months)

End.

12) 10,701 units = (131,911 + 66,577 + 208,518) ÷ 39 months

IP HIGH COURT OF KOREA
THIRD DIVISION
DECISION

Case No.	2023Heo13599 Invalidation of Registration (Patent)
Plaintiffs	1. Masta FA Co., Ltd. Representative Director A 2. AB Medical Co., Ltd. Representative Director B Counsel for Plaintiffs Attorney Jongseok KIM, Substitute Counsel for Plaintiffs Patent Attorneys Myungsoo KIM, Yujin YANG
Defendant	Industry-Academic Cooperation Foundation of Chonnam National University Representative: Director C Counsel for Defendant Patent Firm SRB Patent Attorneys in Charge Daewoong YOON, Yongki CHOI
Date of Closing Argument	November 26, 2024
Decision Date	January 16, 2025

ORDER

1. All of the Plaintiffs' claims are dismissed.

2. Litigation costs shall be borne by the Plaintiffs.

DEMAND FOR RELIEF

The IPTAB Decision 2022Dang2993 and 2022Dang793 (consolidated), decided August 23, 2023, shall be revoked.

OPINION

1. Basic Facts

A. The Defendant's Patented Invention at Issue (Plaintiffs' Exhibit No. 2)

1) Title of Invention: Tube aligning apparatus for manufacturing blood collection tubes

2) Filing Date of Application / Registration Date / Registration Number: March 21, 2012 / November 13, 2013 / No. 10-1331241

3) Claims

[Claim 1] A tube aligning apparatus for manufacturing blood collection tubes, characterized by comprising: a base frame; a tube supply unit installed on the base frame for storing tubes constituting the bodies of blood collection tubes and supplying those tubes; a cartridge supply unit for supplying cartridges having insertion holes into which tubes are inserted; a cartridge support unit installed adjacent to the tube supply unit for supporting and moving the cartridges supplied from the cartridge supply unit; and a tube loading unit for pushing the tubes supplied from the tube supply unit and inserting them into the insertion holes of a cartridge supported by the cartridge support unit (hereinafter "**Claim 1 at Issue**"; the remaining claims are referred to in the same manner).

[Claim 2] The tube aligning apparatus for manufacturing blood collection tubes according to Claim 1, characterized in that the tube supply unit comprises: a tube container installed on the base frame for

storing tubes and supplying tubes to the process; a pressing unit that presses the tubes stored in and supplied from the tube container so that directional stability is maintained; a tube aligning groove unit installed at the lower part of the tube container and having guide grooves formed at the same spacing and in the same number as the insertion holes in the row or column direction of the cartridge; and a sensing unit installed on the tube container for sensing the state of the stored quantity of tubes in the tube container.

[Claim 3] The tube aligning apparatus for manufacturing blood collection tubes according to Claim 2, characterized in that the pressing unit comprises: a weight member positioned inside the tube container for pressing down the upper part of the stacked pile of tubes; and a guide rod guided by a guide bracket installed at the upper part of the tube container and having one end connected to the weight member.

[Claim 4] The tube aligning apparatus for manufacturing blood collection tubes according to Claim 1, characterized in that the cartridge supply unit comprises: a cartridge container for storing cartridges; and a cartridge loading unit for loading the cartridges stored in the cartridge container onto the cartridge support unit.

[Claim 5] The tube aligning apparatus for manufacturing blood collection tubes according to Claim 4, characterized in that the cartridge support unit comprises: a cartridge holder unit that supports the cartridge so as to hold it fixed while tubes are inserted into the insertion holes of the cartridge supplied from the cartridge loading unit; and a cartridge position-moving unit that moves the cartridge from the cartridge holder unit to a determined position.

[Claim 6] The tube aligning apparatus for manufacturing blood collection tubes according to Claim 1, characterized in that the tube loading unit comprises: a push rod that pushes the tubes seated in the tube aligning groove unit in the direction of the cartridge; a transfer

block to which one side of the push rod is fixed; a push actuator for advancing and retracting the transfer block; and a guide rod installed on the base frame for supporting the advance and retraction of the transfer block.

4) Principal Contents of the Description of the Invention and Drawings

As set forth in [Appendix 1] (contents omitted).

B. The Prior Art[1)]

1) Prior Art 1 (Plaintiffs' Exhibit No. 4)

An invention entitled "Apparatus and method for manufacturing vacuum blood collection tubes," published in the U.S. registered patent gazette (Patent No. US 5,129,213) on July 14, 1992; its principal contents are as set forth in [Appendix 2] (contents omitted).

2) Prior Art 5 (Plaintiffs' Exhibit No. 15)[2)]

An invention entitled "Carrier system for tubular members and filling system for highly viscous liquid," published in the Japanese patent gazette (Patent No. 3575289) on October 13, 2004; its principal contents are as set forth in [Appendix 3] (contents omitted).

3) Other Prior Art (Plaintiffs' Exhibits Nos. 5, 6, 7, 16, and 24)

Prior Art 2[3)] is an invention entitled "Hopper device for vending machines," published in the registered utility model gazette (Registration No. 20-0217858) on March 15, 2001; Prior Art 3 is an invention

---

1) The explanations of the reference numerals have been added for ease of understanding.

2) This is a prior art reference first submitted at the litigation stage of this case.

3) Prior Art 2 is a device under the Utility Model Act rather than an invention, but for convenience it is referred to below as an invention.

entitled “Automatic container packing method,” published in the U.S. published patent application gazette (Publication No. US 2007/0157568) on July 12, 2007; Prior Art 4 is an invention entitled “Continuous packaging machine for tape rolls,” published in the U.S. registered patent gazette (Patent No. US 5,732,536) registered on March 31, 1998; Prior Art 6 is an invention entitled “Tube dispenser,” published in the Japanese published patent application gazette (Publication No. P2008-120404) on May 29, 2008; and Prior Art 7 is an invention entitled “Bottle guiding and regulating device in a bottle caser,” published in the Japanese published utility model gazette (Publication No. Sho 59-22702) on February 13, 1984; the principal contents of these prior art references are omitted.

C. Procedural History of the IPTAB Decision

1) On March 22, 2022, Plaintiff AB Medical Co., Ltd. filed with the Intellectual Property Trial and Appeal Board (hereinafter the “IPTAB”), against the Defendant, a petition for invalidation with respect to Claims 1, 4, and 6 at Issue, asserting that the inventive step of Claims 1, 4, and 6 at Issue is denied by Prior Art 1 or by the combination of Prior Art 1 with well-known and commonly used art (Case No. 2022Dang793).

2) On October 31, 2022, Plaintiff Masta FA Co., Ltd. filed with the IPTAB, against the Defendant, a petition for invalidation with respect to Claims 1 through 6 at Issue, asserting that the inventive step of Claims 1, 4, and 6 at Issue is denied by Prior Art 1 or by the combination of Prior Art 1 and 3; that the inventive step of Claims 2 and 3 at Issue is denied by the combination of Prior Art 1 and 2 or by the combination of Prior Art 1 and 2 with well-known and commonly used art; and that the inventive step of Claim 5 at Issue is denied by the combination of Prior Art 1 and 3 (Case No. 2022Dang2993).

3) The IPTAB consolidated the Plaintiffs' respective petitions for trial and, after examination, rendered a decision on August 23, 2023 dismissing the Plaintiffs' petitions (hereinafter "**IPTAB Decision at Issue**") on the ground that "Claim 1 at Issue could not readily have been invented by a person having ordinary skill in the art to which the invention pertains (hereinafter '**a person of ordinary skill in the art**') from Prior Art 1 or from the combination of Prior Art 1 and 3, and its inventive step is therefore not denied; and since Claims 2 through 6 at Issue are directly or indirectly dependent claims of Claim 1 at Issue and include all of the technical features of Claim 1 at Issue, so long as the inventive step of Claim 1 at Issue is not denied, the inventive step of Claims 2 through 6 at Issue is likewise not denied."

[Factual basis] Undisputed facts; the statements in each of Plaintiffs' Exhibits Nos. 1 through 7, 15, 16, and 24; the overall purport of the pleadings and oral arguments

2. The Parties' Arguments

A. The Plaintiffs

The inventive step of the Patented Invention at Issue is denied for the following reasons. The IPTAB Decision at Issue, which reached a different conclusion, is unlawful.

1) Where Prior Art 1 Is Taken as the Primary Prior Art

A) Claim 1 at Issue could readily have been invented from Prior Art 1. Since Claim 1 at Issue merely states, with respect to the tube loading unit, that it "pushes the tubes and inserts them into the insertion holes of a cartridge supported by the cartridge support unit," it must not be construed as limited to the tube loading unit pushing the tubes and inserting them directly into the insertion holes of the cartridge. The tube loading unit of Claim 1 at Issue is identical to the

air cylinder and pusher of Prior Art 1.

B) Even if the tube loading unit of Claim 1 at Issue is construed restrictively as above, the tube loading unit of Claim 1 at Issue could readily be derived by a person of ordinary skill in the art by combining the loading device of Prior Art 5 with Prior Art 1.

C) The inventive step of Claims 2 and 3 at Issue is denied by the combination of Prior Art 1 and 6 or the combination of Prior Art 1, 6, and 5; that of Claim 4 at Issue by the combination of Prior Art 1 and 5; that of Claim 5 at Issue by the combination of Prior Art 1, 3, and 5; and that of Claim 6 at Issue by the combination of Prior Art 1 and 7 or the combination of Prior Art 1, 7, and 5.

2) Where Prior Art 5 Is Taken as the Primary Prior Art

A) The Patented Invention at Issue and Prior Art 5 both relate to aligning apparatus that automate the process of supplying cylindrical containers, and belong to the same technical field in that they are in the field of factory automation equipment. Even if Prior Art 5 is not in the same technical field as the Patented Invention at Issue, the technical fields of the two inventions are related in that both concern process automation of aligning tube-shaped containers, so that a person of ordinary skill in the art could readily appropriate Prior Art 5 for the Patented Invention at Issue. Since all of the technical configurations of Claim 1 at Issue are disclosed in Prior Art 5, Claim 1 at Issue could readily be derived by a person of ordinary skill in the art from Prior Art 5.

B) The inventive step of Claims 2 and 3 at Issue is denied by the combination of Prior Art 5, 1, and 6; that of Claim 4 at Issue by Prior Art 5; that of Claim 5 at Issue by Prior Art 5 or the combination of Prior Art 5 and 3; and that of Claim 6 at Issue by Prior Art 5 or the combination of Prior Art 5 and 7.

B. The Defendant

The inventive step of the Patented Invention at Issue is not denied, for the following reasons. The IPTAB Decision at Issue, which reached the same conclusion, is therefore justified.

1) Prior Art 1 neither discloses nor suggests configurations identical to the base frame, tube supply unit, cartridge support unit, and tube loading unit of Claim 1 at Issue.

2) Prior Art 5 not only differs in technical field from Claim 1 at Issue but also differs in the technical problem to be solved. Claim 1 at Issue provides a tube aligning apparatus for manufacturing blood collection tubes that automates the operation of inserting and aligning the closed portions of blood collection tubes in the insertion holes of a cartridge, thereby preventing errors due to manual work and increasing productivity, whereas Prior Art 5 provides a system for effectively conveying container bodies whose bodies are made of a soft material.

3) Prior Art 7 likewise relates to a bottle guiding and regulating device for box-packing bottle containers, and its technical field is entirely different from that of Prior Art 1.

4) Since the inventive step of Claim 1 at Issue is recognized, the inventive step of Claims 2 through 6 at Issue, which are its dependent claims, is likewise not denied.

3. Whether the IPTAB Decision at Issue Is Unlawful

A. Whether the Inventive Step of Claim 1 at Issue Is Denied

1) Legal Principles Taken as the Basis of the Determination

A) In determining whether an invention has an inventive step, one must first ascertain, on the basis of the evidence and other

materials appearing in the record, at least the scope and content of the prior art, the differences between the invention subject to the inventive-step determination and the prior art, and the level of skill of a person of ordinary skill in the art to which the invention pertains; and then examine whether a person of ordinary skill in the art could readily have invented the invention subject to the inventive-step determination from the prior art, overcoming such differences, in light of the level of technology at the time of the patent application. In so doing, it must not be determined, on the premise of knowledge of the technology disclosed in the specification of the invention subject to the inventive-step determination, whether a person of ordinary skill in the art could readily have made the invention with hindsight (see Supreme Court Decision 2014Hu2184, decided November 25, 2016; Supreme Court Decision 2016Hu1840, decided December 13, 2018; and Supreme Court en banc Decision 2016Hu2522, decided January 22, 2020, etc.).

When determining the inventive step of an invention by citing several prior art documents, one must select the prior art closest to the invention concerned (hereinafter “primary prior art”), then compare the invention concerned with the primary prior art to identify their commonalities and differences, and examine whether a person of ordinary skill in the art could readily have invented the invention concerned, which is subject to the inventive-step determination, from the prior art references, overcoming such differences, in light of the level of technology at the time of the patent application. In this regard, if a suggestion, motivation, or the like indicating that combining or coupling the cited prior art references would lead to the invention concerned is presented in the prior art documents, or, even if not, if it can be found that a person of ordinary skill in the art could readily arrive at such a combination in light of the level of technology at the time of filing of the invention concerned, technical common sense, the basic problems of the technical field concerned, trends of development, the demands of the industry concerned, and the like, then the inventive

step of the invention concerned is denied (see Supreme Court Decision 2005Hu3284, decided September 6, 2007; Supreme Court Decision 2015Hu2341, decided October 31, 2019; and Supreme Court Decision 2020Hu10285, decided August 31, 2023, etc.).

B) The "technical field to which the invention pertains" provided in Article 29(2) of the Patent Act means, in principle, the industrial field in which the invention concerned is used, and in determining its scope, an objective determination must be made by taking together the object, technical configuration, and operational effects of the invention (see Supreme Court Decision 91Hu1298, decided May 12, 1992; Supreme Court Decision 2002Hu987, decided April 25, 2003; and Supreme Court Decision 2006Hu2059, decided July 10, 2008, etc.). Even where the industrial field in which the invention concerned is used differs from that of the prior art, so that it is difficult to use that prior art as prior art denying the inventive step of the invention concerned, if the technical configuration of the prior art at issue is not a configuration applicable only to a particular industrial field but is one that a person of ordinary skill in the art in the industrial field to which the invention concerned belongs could use without particular difficulty in order to solve the technical problem confronting them, then it may be taken as prior art denying the inventive step of the invention concerned (see Supreme Court Decision 2006Hu2059, decided July 10, 2008, and Supreme Court Decision 2009Hu3886, decided March 24, 2011, etc.). Accordingly, in determining whether a person of ordinary skill in the art could readily have made the invention by combining the primary prior art belonging to the technical field of the invention concerned with prior art not belonging to that technical field, it must be examined whether the technical configuration of that prior art is of a general-purpose (汎用) nature that can be used without particular difficulty in order to solve such a technical problem.

Meanwhile, in light of the facts that a person of ordinary skill in the art is an average technician having an ordinary degree of technical

understanding in the technical field to which the invention concerned pertains (see Supreme Court Decision 97Hu2477, decided July 23, 1999, and Supreme Court Decision 2004Hu3362, decided November 25, 2005, etc.), and that the primary prior art selected as the prior art closest to the invention concerned constitutes the starting point from which a person of ordinary skill in the art exercises technical creative ability, in determining whether a person of ordinary skill in the art could readily have made the invention on the basis of primary prior art not belonging to the technical field of the invention concerned, or by combining other prior art therewith, it must be examined both whether the technical configuration of the primary prior art is of a general-purpose nature for solving the above technical problem and whether the overall technical problem of the primary prior art is so close to the technical problem to be solved in the invention concerned that the organic coupling relationship of the technical configurations contributing to solving the overall technical problem of the primary prior art, encompassing the above technical problem, can be regarded as appropriable (轉用) to the technical field to which the invention concerned belongs; and it must not, contrary to this, be determined with hindsight, on the premise of knowledge of the technology disclosed in the specification of the invention concerned, whether a person of ordinary skill in the art could readily have made the invention.

2) Determination on the Assertion Taking Prior Art 1 as the Primary Prior Art

A) Comparison of the Elements of Claim 1 at Issue and Prior Art 1

A comparison of the elements of Claim 1 at Issue with the corresponding configurations of Prior Art 1 is set forth in the table below.

Element	Claim 1 at Issue	Prior Art 1
1	a base frame;	-
2	a tube supply unit installed on the base frame for storing tubes constituting the bodies of blood collection tubes and supplying those tubes;	▶ **Vacuum blood collection tubes are manufactured from tubular containers** (see column 1, lines 30 to 37) ▶ The tubular containers (1) dried during conveyance in the dryer (D) are supplied through a wave-shaped chute (50) to the tubular container aligning conveyor (52) of the tubular container erecting device (E) (see column 7, lines 14 to 63, and FIG. 8) ▶ A **tubular container storing-supplying device** (A) that supplies the tubular containers (1) to the pinhole checker (B) (see column 3, lines 48 to 55, and FIG. 6)
3	a cartridge supply unit for supplying cartridges having insertion holes into which tubes are inserted;	▶ **A transfer container supply conveyor (55) that intermittently moves, by a conveyor, transfer containers (51) having a plurality of holes formed therein for inserting tubular containers**, is arranged to the right of the tubular container aligning conveyor (52), and a guide unit (57) is arranged above the transfer container supply conveyor (55) (see column 7, lines 14 to 63, and FIGS. 8 and 14)
4	a cartridge support unit installed adjacent to the tube supply unit for supporting and moving the cartridges supplied from the cartridge supply unit;	
5	a tube loading unit for pushing the tubes supplied from the tube supply unit and inserting them into the insertion holes of a cartridge supported by the cartridge support unit;	▶ An air cylinder (58) having **a piston rod (58a) to whose end is fixed a pusher (59) that pushes the tubular containers (1)** supplied from the dryer (D) and positioned on the tubular container aligning conveyor (52) **so that they are inserted into the holes of the**

Element	Claim 1 at Issue	Prior Art 1
		transfer containers (51) on the transfer container supply conveyor (55) (see column 7, lines 14 to 63, column 13, line 64 to column 14, line 24, and FIGS. 8 and 14)
6	a tube aligning apparatus for manufacturing blood collection tubes, characterized by comprising the foregoing	▶ A tubular container erecting device (E) that arranges tubular containers within transfer containers in a vacuum blood collection tube manufacturing apparatus (see column 3, lines 22 to 28, column 7, lines 14 to 63, and FIGS. 8 and 14)

B) Analysis of Commonalities and Differences

(1) Element 1 – Base Frame

Prior Art 1 does not expressly disclose a configuration corresponding to the "base frame" of Element 1. However, for the following reasons, it is reasonable to find that a configuration substantially identical to Element 1 is necessarily inherent in Prior Art 1 as well.

(a) Claim 1 at Issue imposes no limitation on the base frame of Element 1 other than that it is a configuration on which the tube supply unit is installed.

(b) The specification of the Patented Invention at Issue likewise describes Element 1 only as a configuration on which the tube supply unit, tube container, support member, tube aligning groove unit, cartridge holder unit (paragraph numbers [0016], [0026], [0030], and [0033]), and the like are installed, and discloses nothing whatsoever about its specific technical configuration or operational effects. Element 1 can only be regarded as a configuration encompassing a general frame-type structure on which the configurations performing the respective processes in the tube aligning apparatus of Claim 1 at Issue — which inserts tubes used in manufacturing blood collection tubes into the insertion holes of a cartridge — are installed, connected, and fixed.

(c) Both Claim 1 at Issue and Prior Art 1 relate to a tube aligning apparatus [tubular container erecting device] that inserts cylindrical tubes [tubular containers][4] into the insertion holes [holes] of a cartridge [transfer container]. In designing or manufacturing an apparatus combining a plurality of configurations performing two or more functions, setting the position of each configuration in consideration of process efficiency, ease of operation, and the like, and providing a frame to which such configurations can be connected and fixed, constitutes general technical common sense in the technical field to which this invention pertains.

(2) Element 2 – Tube Supply Unit

(a) Element 2 and the corresponding configuration of Prior Art 1 are substantially identical in that a tube supply unit [dryer (D) and tubular container aligning conveyor] that supplies tubes [tubular containers] to the tube aligning apparatus [tubular container erecting device] is provided.

(b) However, there is a difference in that Element 2 stores the tubes transferred from the tube inlet (45), whereas the dryer (D) of Prior Art 1 dries the tubes [tubular containers] while conveying them continuously and can hardly be regarded as a device that stores the tubes [tubular containers] (hereinafter "**Difference 1**").

(3) Elements 3 and 4 – Cartridge Supply Unit and Cartridge Support Unit

(a) Elements 3 and 4 and the corresponding configurations of Prior Art 1 are substantially identical in that they are a cartridge support unit [transfer container supply conveyor] that supports and moves a cartridge [transfer container] in which insertion holes [holes (56)] are formed for insertion of the tubes [tubular containers] supplied

4) The elements of the prior art corresponding to the elements of the Patented Invention at Issue are indicated in square brackets.

to the tube aligning apparatus [tubular container erecting device].

(b) However, Claim 1 at Issue states "a cartridge support unit installed adjacent to the tube supply unit for supporting and moving the cartridges supplied from the cartridge supply unit," and the ordinary meaning of the term "adjacent" is "being neighboring" or "abutting alongside," while "being neighboring" means "being side by side or close so that the boundaries adjoin each other." Accordingly, it is reasonable to find that, in Claim 1 at Issue, the cartridge support unit installed adjacent to the tube supply unit is "connected to the tube supply unit, or, even if not connected, is so close that their boundaries adjoin each other without any other technical configuration interposed between them." By contrast, there is a difference in that, in Prior Art 1, the transfer container supply conveyor is located at the lower right of the tubular container aligning conveyor, with a guide unit (57) interposed between them, so that it is not installed adjacent to the tubular container aligning conveyor (hereinafter "**Difference 2**").

(c) Meanwhile, the Defendant asserts that the transfer container supply conveyor of Prior Art 1 also differs from the cartridge support unit of Claim 1 at Issue in that it merely moves the transfer containers without supporting them.

However, the ordinary meaning of the term "support" is "to hold up or bear a heavy object," and technically it may be understood by a person of ordinary skill in the art as meaning approximately "to hold an object so that it does not move." The transfer container supply conveyor of Prior Art 1 conveys a transfer container to the position where the tubular containers are inserted, then pauses briefly while the tubular containers are inserted, and, once insertion is complete, conveys the transfer container with the inserted tubular containers to the subsequent process. In such a conveyor system, it is obvious to a person of ordinary skill in the art that, while intermittently conveying a transfer container placed thereon, the conveyor holds the transfer container so that it does not move while the tubular containers are

being inserted. Accordingly, even though it is not expressly stated in Prior Art 1, it is reasonable to find that the transfer container supply conveyor of Prior Art 1 likewise conveys the transfer containers while supporting them. The Defendant's assertion is therefore not accepted.

(4) Element 5 – Tube Loading Unit

(a) Element 5 and the corresponding configuration of Prior Art 1 are substantially identical in that a tube loading unit [pusher (59)] is provided that pushes the tubes [tubular containers] supplied from the tube supply unit [dryer (D) and tubular container aligning conveyor (52)] and inserts them into the insertion holes [holes] of the cartridge [transfer container] supported by the cartridge support unit [transfer container supply conveyor].

(b) In this regard, the Defendant asserts that there is a difference in that Element 5 pushes the tubes supplied from the tube supply unit and inserts them into the cartridge, whereas the corresponding configuration of Prior Art 1 pushes tubes that have been supplied from the dryer (D), corresponding to the tube supply unit, and then transferred again to the tubular container aligning conveyor, and inserts them into the cartridge.

However, since Claim 1 at Issue states "a tube supply unit installed on the base frame for storing tubes constituting the bodies of blood collection tubes and supplying those tubes" and "a tube loading unit for pushing the tubes supplied from the tube supply unit and inserting them into the insertion holes of a cartridge supported by the cartridge support unit," considering the organic coupling relationship of the elements, the tube supply unit must be regarded as functioning not only to store the tubes but also to supply them to a position where the tube loading unit can push them and insert them into the insertion holes of the cartridge supported by the cartridge support unit. In Prior Art 1, however, the tubular containers first reach a position where the pusher can push them only after

passing through the tubular container aligning conveyor, so it is reasonable to find that the tubular container aligning conveyor is likewise included in the tube supply unit. The Defendant's assertion, premised on the tubular container aligning conveyor not corresponding to the tube supply unit, is therefore not accepted.

(5) Element 6

Element 6 and the corresponding configuration of Prior Art 1 are substantially identical in that both are tube [tubular container] aligning apparatus [erecting devices] for manufacturing blood collection tubes.

C) Examination of the Differences

(1) Difference 1

For the following reasons, Difference 1 could readily be overcome by a person of ordinary skill in the art from Prior Art 1.

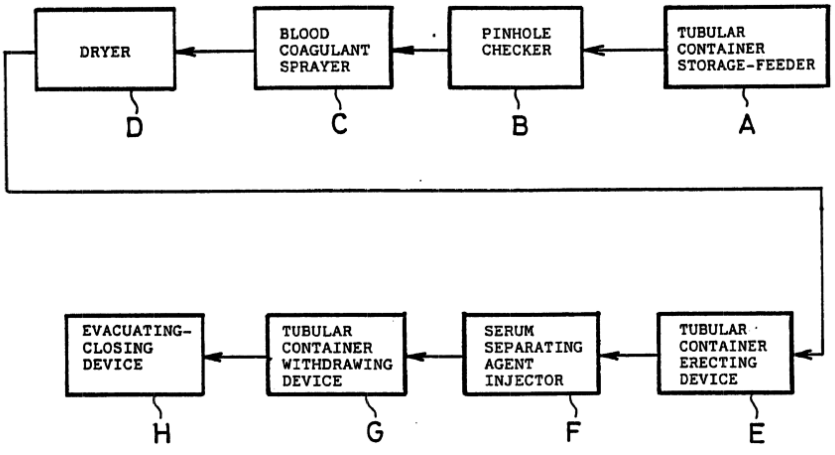
(a) Claim 1 at Issue relates to a tube aligning apparatus for automating the process of inserting and aligning tubes in a cartridge so that processes such as gel injection, liquid reagent spraying, drying, rubber packing assembly, and cap assembly can proceed smoothly on the cylindrical tubes constituting the bodies of blood collection tubes, before those processes are performed in manufacturing blood collection tubes (see Plaintiffs' Exhibit No. 2, paragraph numbers [0004]–[0007]).

(b) Meanwhile, Prior Art 1 is a vacuum blood collection tube manufacturing apparatus that performs, in sequence, all or part of the processes of a tubular container storing-supplying device (A), a pinhole checker (B), a blood coagulant sprayer (C), a dryer (D), a tubular container erecting device (E), a serum separating agent injector (F), a tubular container withdrawing device (G), and an evacuating-closing device (H), in which some of the processes corresponding to processes subsequent to the alignment performed in Claim 1 at Issue are carried out before that alignment (see column 3, lines 22 to 28, and FIG. 1).

Prior Art 1

The vacuum blood collection tube manufacturing apparatus shown in FIG. 1 includes a **tubular container storing-supplying device** (A), a pinhole checker (B), a blood coagulant sprayer (C), a **dryer** (D), **a tubular container erecting device** (E), a serum separating agent injector (F), a tubular container withdrawing device (G), and an evacuating-closing device (H) (see column 3, lines 22 to 28).

FIG. 1



(c) That is, in manufacturing blood collection tubes from cylindrical tubes, under Claim 1 at Issue, the tubes are first inserted into the cartridge insertion holes so as to be aligned in the cartridge and the subsequent processes are then performed, whereas in Prior Art 1, some of the processes necessary for manufacturing blood collection tubes [blood coagulant sprayer, dryer] are first carried out, then, at an intermediate stage, the tubes [tubular containers] are inserted and aligned in the insertion holes [holes] of the cartridge [transfer container] [tubular container erecting device], and subsequent processes (serum separating agent injector, evacuating-closing device) are then performed. The two inventions differ according to whether the process of aligning the tubes in the cartridge is performed first among all the processes necessary for manufacturing blood collection tubes or at an intermediate point; and by reason of this, the Patented Invention at

Issue provides in the tube aligning apparatus a tube supply unit that stores and supplies the tubes, whereas in Prior Art 1 the tubular containers supplied from the tubular container storing-supplying device (A) are supplied to the tubular container erecting device (E) after passing through the blood coagulant sprayer (C), the dryer (D), and so forth.

(d) However, whether, in manufacturing blood collection tubes, the tubes are first aligned in the cartridge insertion holes and the necessary subsequent processes then performed, or whether the alignment is performed after some processes have been carried out, amounts to no more than a matter that a person of ordinary skill in the art could simply alter as required by design. Moreover, it is general technical common sense to a person of ordinary skill in the art that, where the process of aligning tubes in the cartridge insertion holes is performed before the other processes, means for storing and then supplying the tubes to be aligned must naturally be provided in the tube aligning apparatus. Nor is there any objective basis or circumstance for finding that a markedly enhanced effect unpredictable from Prior Art 1 arises from altering the blood collection tube manufacturing apparatus so that the process of inserting and aligning the tubes in the cartridge is performed before the other processes.

(e) Thus, not only can no particular technical significance be found in the difference in process order between Claim 1 at Issue and Prior Art 1, but Prior Art 1 also discloses a tubular container storing-supplying device (A) including a hopper (4) that stores and supplies tubular containers (see Plaintiffs' Exhibit No. 4, column 3, lines 48 to 55, and FIG. 6). It appears that a person of ordinary skill in the art could readily overcome Difference 1 by exercising creative ability, such as by altering part of the process order and substituting a hopper performing a storage function for the dryer (D) of Prior Art 1.

(2) Difference 2

For the following reasons, it is reasonable to find that Difference 2 could not readily be overcome by a person of ordinary skill in the art even by combining Prior Art 5 with Prior Art 1.

(a) In Prior Art 1, the transfer container supply conveyor is located at the lower right of the tubular container aligning conveyor in which the tubular containers supplied from the dryer (D) are received, and a guide unit is arranged between the tubular container aligning conveyor and the transfer container supply conveyor. When a transfer container placed on the transfer container supply conveyor with the holes for insertion of tubular containers facing upward comes to be positioned below the tubular container aligning conveyor, the pusher fixed to the end of the piston rod of the air cylinder pushes the tubular containers seated on the tubular container aligning conveyor to one side edge of that conveyor, and the tubular containers fall downward by gravity from that side edge along the guide unit and are inserted into the holes of the transfer container in a vertically erect state.

FIG. 14 of Prior Art 1

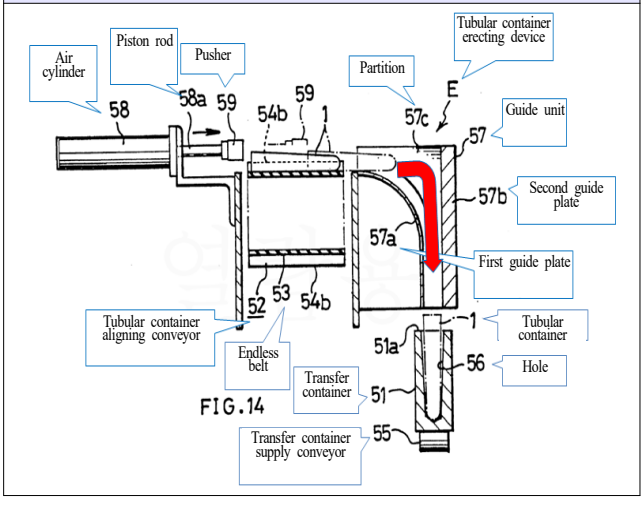
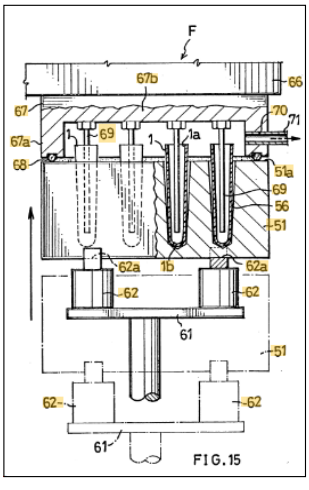


FIG. 15

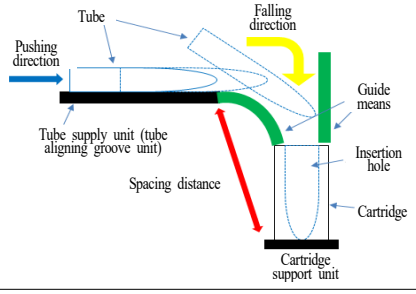
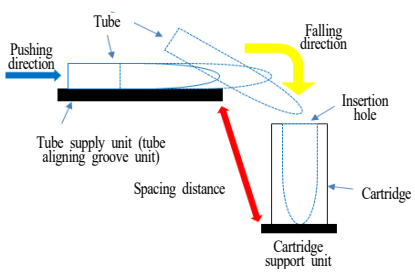


(b) That is, in Prior Art 1, the tubular containers pushed horizontally by the pusher have their direction of movement changed through the guide unit and can thus be inserted into the transfer container in a vertically erect state. In Prior Art 1, however, after the process in which the tubular containers are inserted into the transfer container in an erect state (TABULAR CONTAINER ERECTING DEVICE; E) as described above, the serum separating agent injection process (SERUM SEPARATING AGENT INJECTOR; F) follows (see Plaintiffs' Exhibit No. 4, FIG. 15), and in that process it is far more efficient for the operation to be carried out in the vertical direction so that the serum separating agent naturally settles at the bottom of the container by gravity. The guide unit of Prior Art 1 may therefore be said to be an essential configuration that makes it possible to realize the vertically aligned state of the blood collection tubes, without any complicated process such as rotation, for the subsequent process requiring vertical alignment. It is difficult to find that a person of ordinary skill in the art would have any motivation to remove the guide unit from Prior Art 1.

(c) Even if the guide unit were removed from Prior Art 1, in order for the tubular containers in Prior Art 1 to fall by gravity and be inserted into the insertion holes of the transfer container, space must be secured sufficient for the tubular containers to rotate and be inserted into the holes of the transfer container, so that the tubular container aligning conveyor and the transfer container supply conveyor would inevitably be spaced apart. It is difficult to find that it would be easy for a person of ordinary skill in the art to install the tubular container aligning conveyor and the transfer container supply conveyor

adjacent to each other in Prior Art 1.

Illustration of the coupling relationship between the cartridge support unit and a tube supply unit (tube aligning groove unit) of the type that pushes tubes to a certain position and lets them fall by gravity into the cartridge insertion holes

Where guide means are present	Where guide means are absent
	

(d) Meanwhile, Prior Art 5 does disclose a configuration in which tubular members aligned horizontally on a second conveyor are pushed and inserted into the receiving portions of a product delivery box, as in Claim 1 at Issue. However, as discussed above, Prior Art 1 is an invention relating to a blood collection tube manufacturing apparatus and manufacturing method, in which a process of aligning the blood collection tubes in a vertical state is essential for processes such as injecting a serum separating agent into the blood collection tubes; and Prior Art 1 pushes the tubular containers by means of the comparatively simple configuration of a guide unit, aligns them in the transfer container in a vertically erect state, and then conveys them to the subsequent process. That being so, it cannot be said that a person of ordinary skill in the art would have any motivation to alter the tubular container insertion method of Prior Art 1 into a method such as that of Prior Art 5.

(e) In this regard, the Plaintiffs assert that pushing tubes directly into the insertion holes of a cartridge is no more than well-known and commonly used art generally employed in the field of automation technology, so that altering the configuration of Prior Art

1, in which tubular containers are inserted into transfer containers in the vertical direction, into one in which they are inserted in the horizontal direction constitutes a mere design change by a person of ordinary skill in the art.

According to the statements in Plaintiffs' Exhibits Nos. 6, 7, and 17 through 21, it is found that, at the time of filing of the Patented Invention at Issue, apparatus for packing articles such as tubes, tape rolls, cylindrical articles, and stacked paper cups into boxes were already publicly known. However, those apparatus do not fall within the technical field of medical devices, including blood collection tube manufacture. Furthermore, in order to automate the process of pushing articles and inserting them into a box, the specific configuration for pushing the article and inserting it into the box, and the organic coupling relationships among the elements, must be designed in accordance with the characteristics of the article itself — such as its shape, size, and material — and the purpose of inserting the article into the insertion holes of the box, such as the direction in which it is to be aligned after insertion. Not only is it difficult to regard such a specific configuration, and the apparatus in which those elements are organically combined, as being well-known and commonly used art, but taking together the particularity of the blood collection tube manufacturing field — in which, after the tubes are inserted into the insertion holes of the cartridge, they must be erected with their openings facing upward in order to inject liquid reagents into the tubes in the subsequent process — the mere fact that apparatus for pushing articles and packing them into boxes were publicly known in several patent gazettes cannot mean that altering the direction in which tubes are inserted into the cartridge insertion holes, in aligning tubes for manufacturing blood collection tubes in a cartridge, constitutes a mere design change. The Plaintiffs' assertion is therefore not accepted.

D) Sub-conclusion

Claim 1 at Issue cannot be regarded as one that a person of ordinary skill in the art could readily have invented on the basis of Prior Art 1 or by combining Prior Art 5 with Prior Art 1, and its inventive step is therefore not denied. The Plaintiffs' assertion contesting this is not accepted.

3) Determination on the Assertion That the Inventive Step Is Denied by Prior Art 5

Claim 1 at Issue relates to a method of manufacturing medical blood collection tubes, whereas Prior Art 5 is an invention relating to an apparatus for manufacturing construction sealants or adhesives; the two inventions are entirely different in technical field, as the industrial field in which the inventions are used.

Furthermore, for the following reasons, it is difficult to find that the technical configuration of Prior Art 5, which would be the object of use in order to solve the technical problem confronting a person of ordinary skill in the art, is of a general-purpose nature, or that the technical problems of Prior Art 5 and of Claim 1 at Issue are so close to each other that the organic coupling relationship of that technical configuration could be appropriated to the technical field to which Claim 1 at Issue belongs. It is therefore determined that a person of ordinary skill in the art could hardly take Prior Art 5 as the prior art constituting the starting point for deriving Claim 1 at Issue, and the Plaintiffs' assertion, premised otherwise, is not accepted without need for further examination.

A) First, this court examines Prior Art 5 specifically. Conventional filling containers for construction sealants were made of a rigid material and could not be compressed to a small size after use, so there was a problem that the waste remaining after use was bulky. To solve this, a soft container was proposed in which the body portion of the container is made of a soft film material so that the body itself is

compressed to discharge the sealant from the upper outlet, thereby leaving less waste. However, because the body of a soft container is soft, there was a risk of deformation or damage during conveyance if it were conveyed by the carrier system used for conveying conventional rigid containers, and a carrier system capable of efficiently conveying soft containers was therefore required (Plaintiffs' Exhibit No. 15, paragraph numbers [0004]–[0006]).

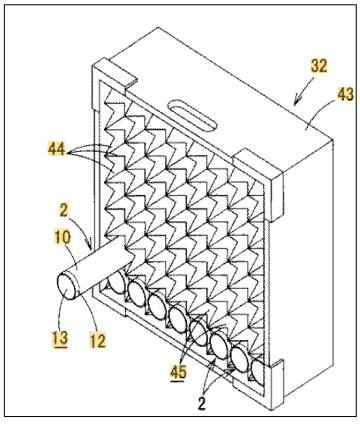
B) As set forth above, in order to solve the technical problem of preventing deformation of soft containers during conveyance, Prior Art 5 introduces a delivery box provided with lattice-shaped partition plates (44) capable of stably fixing the containers, and also discloses the technical content that, in order to prevent the soft containers from being damaged during conveyance, it is preferable to set the depth of the receiving portion (45) longer than the length of the container (Plaintiffs' Exhibit No. 15, paragraph numbers [0032] and [0047]).

Prior Art 5

FIG. 6

[0032] If the angle θ of the apex 46a of the cutout 46 is too small, the cut becomes deep and the strength of the partition plate 44 decreases; if it is too large, the insertion-side end of the container body 2 cannot be smoothly guided; the angle is therefore set appropriately in consideration of these factors. However, so long as the cutout 46 is configured such that the cutout width narrows toward the inner portion (the apex), cutouts of various shapes may be adopted, such as the cutout 46A notched in a parabolic shape as shown in FIG. 9(a), or the cutout 46B in which an intermediate portion bulges inward as shown in FIG. 9(b). **The depth D of the receiving portion 45 may be set shorter than the length L of the container body 2; however, where the barrel portion of the container body 2 is a soft film body, damage during**

FIG. 15



conveyance is conceivable, and it is therefore preferable to set it longer than the length L of the container body 2.

[0047] According to the carrier system for tubular members relating to Claim 1, **the container bodies are conveyed while once accommodated in a product delivery box, so that damage to the container bodies during conveyance can be effectively prevented. For this reason, even where the container body has a barrel portion made of a flexible film body, damage, deformation, and the like during conveyance can be reliably prevented.** In addition, since the conveying apparatus is provided with a delivery device that takes the container bodies out of the product delivery box and delivers them, it becomes possible to automate the conveyance and transfer of the container bodies. Moreover, since the delivery device is provided with an expanding head, the container body is held from the inside by the expanding head and delivered to the next process, so that positional misalignment of the container body at the time of transfer can be reduced. Furthermore, even where the container body is made of a flexible film body, configuring the expanding head to conform to the shape of the container body makes it possible to hold and transfer the container body reliably.

That is, the object of Prior Art 5 is to provide a system that loads soft tubular members into a specially designed delivery box and conveys them, in order to prevent the soft tubular members — introduced so as to reduce the volume of waste remaining after use — from being deformed during conveyance and thereby to improve conveyance efficiency.

C) Now, in designing an apparatus that pushes some article into a box for conveyance, the specific configuration of each technical element that aligns the article in front of the box, pushes it, and supports the box so that the article is inserted, as well as the organic coupling relationships among the elements, may differ according to the characteristics of the article itself — such as its shape, size, and material — and the purpose of inserting the article into the box, such as the direction in which it is to be aligned after insertion. Prior Art 5, however, relates to a tubular member carrier system suited to improving conveyance efficiency by preventing deformation during

conveyance of soft tubular members whose bodies can be readily compressed, and it is difficult to regard such a carrier system of Prior Art 5 as a general-purpose technical configuration that could be adopted for pushing every kind of article into a box.

D) In particular, Claim 1 at Issue relates to a tube aligning apparatus for manufacturing blood collection tubes. The following are matters obviously recognized by a person of ordinary skill in the art: that stability of internal volume appears important for blood collection tubes in order to ensure the accuracy and reliability of blood collection; that blood collection tubes may include a configuration that readily draws blood into the container using a pressure differential arising from internal decompression (see Plaintiffs' Exhibit No. 2, paragraph number [0003]), and that physical deformation would inevitably occur if a soft container were decompressed; and that, in particular, since fillers such as gels and reagents must be injected into tubes for blood collection tubes, vertical alignment with the opening of the tube facing upward is required during most of the process, whereas a soft container is liable to physical deformation and is therefore not easily aligned vertically (see Plaintiffs' Exhibit No. 2, paragraph number [0005], and FIG. 1). Accordingly, because of the ordinary use of blood collection tubes themselves and the requirements of the manufacturing process, blood collection tubes are generally made of glass, rigid plastic, or the like capable of maintaining their shape, and it is reasonable to find that a material soft enough for the body to be readily compressed, such as the soft container of Prior Art 5, is unsuitable for blood collection tubes.

E) Moreover, as discussed above, Prior Art 5 seeks, with respect to soft containers introduced so as to reduce the volume of waste when the container bodies of tubular members are discarded after use, to prevent the soft tubular members from being damaged during conveyance by setting the depth of the receiving portion of the delivery box into which the soft container is inserted longer than the

length of the tubular member, so as to prevent the soft container from being deformed during conveyance and thereby improve conveyance efficiency. By contrast, the Patented Invention at Issue seeks to improve productivity by automating the operation — previously performed manually — of inserting and aligning tubes in the insertion holes of a cartridge, so that processes such as gel injection, liquid reagent spraying, drying, rubber packing assembly, and cap assembly can be smoothly performed on the cylindrical tubes constituting the bodies of blood collection tubes. Making the material of the tubes soft, or inserting the tubes into the cartridge insertion holes up to their openings, as disclosed in Prior Art 5, can hardly be regarded as an efficient configuration for performing the rubber packing and cap assembly processes at the openings of the tubes while the tubes are inserted and aligned in the cartridge.

F) Although Prior Art 5 does state that, so long as the member is tube-shaped, it may be filled with highly viscous liquids other than those for construction, or rigid tubular members may be conveyed (see Plaintiffs' Exhibit No. 15, paragraph number [0046]), it is difficult to envisage a person of ordinary skill in the art in the medical device field, in inventing an automated blood collection tube manufacturing method, taking as a starting point Prior Art 5 — which not only differs in technical field but whose technical problem can hardly be regarded as close — and appropriating it for blood collection tube manufacture, unless on the premise of prior knowledge of Claim 1 at Issue; and this must be regarded as typical hindsight.

B. Whether the Inventive Step of Claims 2 Through 6 at Issue Is Denied

Claims 2 through 6 at Issue are dependent claims directly or indirectly citing Claim 1 at Issue and include, as they stand, the technical features of Claim 1 at Issue. Accordingly, so long as the inventive step of Claim 1 at Issue is not denied, the inventive step of

Claims 2 through 6 at Issue is likewise not denied, without need for further examination.

C. Lawfulness of the IPTAB Decision at Issue

The inventive step of the Patented Invention at Issue is not denied by the prior art. The IPTAB Decision at Issue, which reached the same conclusion, is justified, and there exists no ground of illegality warranting revocation, as asserted by the Plaintiffs.

4. Conclusion

The Plaintiffs' claims seeking revocation of the IPTAB Decision at Issue are all without merit and are therefore dismissed, and the court renders its decision as set forth in the Order.

Presiding Judge Taeksoo JUNG
Judge Jaepil YUN
Judge Hyunjung SONG

IP HIGH COURT OF KOREA
TWENTY-FIRST DIVISION
DECISION

Case No.	2024Na10157 Claim for Employee Invention Compensation
Plaintiff, Appellant and Appellee	A Counsel for Plaintiff Jeongse Law Firm Attorneys in Charge Dongsoo HAN, Hongseok SONG
Defendant, Appellee and Appellant	Samsung Electronics Co., Ltd. Representative Director B Counsel for Defendant Bae, Kim & Lee LLC Attorneys in Charge Taeksoo KWON, Jungdae KIM, Moonki NAM, Changsoon YOO
District Court's Decision	Seoul Central District Court Decision 2020GaHap551030, decided December 14, 2023
Date of Closing Argument	May 8, 2025
Decision Date	July 24, 2025

ORDER

1. The judgment of the first instance is modified as follows.

A. The Defendant shall pay to the Plaintiff KRW 2,305,686,139, together with the amounts calculated at the rates of 5% per annum on KRW 2,141,987,047 thereof from June 19, 2020 to December 14, 2023, 5% per annum on KRW 163,699,092 from June 19,

2020 to July 24, 2025, and 12% per annum from the day following each of the said dates until full payment.

B. The remainder of the Plaintiff's claim is dismissed.

2. Of the total litigation costs, 20% shall be borne by the Plaintiff and the remainder by the Defendant.

3. Paragraph (1)A may be provisionally executed.

DEMAND FOR RELIEF

1. Plaintiff's Demand

The Defendant shall pay to the Plaintiff KRW 3,000,000,000, together with the amount calculated at the rate of 12% per annum from the day following the date of service of a copy of the complaint in this case until full payment.

2. Appellant's Demand

A. The Plaintiff

The part of the judgment of the first instance against the Plaintiff corresponding to the amount ordered to be paid below shall be reversed. The Defendant shall pay to the Plaintiff KRW 858,012,953, together with the amount calculated at the rate of 12% per annum from the day following the date of service of a copy of the complaint in this case until full payment.

B. The Defendant

The part of the judgment of the first instance against the Defendant shall be reversed, and the Plaintiff's claim corresponding to the reversed part shall be dismissed.

OPINION

1. Basic Facts

Except as modified below, the grounds to be stated by this Court in this part are the same as those stated in the corresponding part of the judgment of the first instance and are therefore cited as they are pursuant to the main text of Article 420 of the Civil Procedure Act.

○ Paragraph F. on page 7 of the judgment of the first instance is deleted.

2. Summary of the Plaintiff's Arguments

The profits the Defendant obtained from the Inventions at Issue are: ① royalty income of USD 63,168,751 (DVD 6C: USD 31,547,693; One-Blue: USD 31,621,058), calculated by multiplying the royalties the Defendant received from each patent pool (DVD 6C: USD 49,331,812; One-Blue: USD 67,422,300) by the proportion accounted for by the Patented Inventions at Issue (DVD 6C: 63.95%; One-Blue: 46.9%); ② royalty income of USD 180,408,240, calculated by multiplying the additional royalties (USD 302,800,000) that the Defendant received from four companies including Hitachi through the Cross-License Agreements at Issue by the proportion accounted for by the Patented Inventions at Issue (59.58%); and ③ the amount equivalent to the royalties that the Defendant was relieved from paying through the Cross-License Agreements at Issue (hereinafter "Royalty Exemption Benefit"), that is, an exemption benefit of USD 327,510,671 (DVD 6C: USD 85,436,473; One-Blue: USD 166,917,674; three companies including E: USD 75,156,524), calculated by multiplying, by the proportion accounted for by the Patented Inventions at Issue (59.58%), the sum of the amounts that each patent pool deducted from the royalties payable by the Defendant on account of the existence of the Cross-License Agreements at Issue (DVD 6C: USD 143,397,908;

One-Blue: USD 280,157,225) and the royalty exemption amounts with respect to Philips, Sony, and Pioneer (USD 126,143,882); for a total of USD 571,087,662 (= USD 63,168,751 + USD 180,408,240 + USD 327,510,671).

Considering the efforts made by the Plaintiff and the other co-inventors in completing the Inventions at Issue and in the process of having the Patented Inventions at Issue adopted as standard essential patents, the inventors' contribution rate for the Inventions at Issue is at least 10%, and the Plaintiff's contribution ratio among the co-inventors of the Inventions at Issue is 38.4% on average.

Accordingly, the Defendant is obligated to pay the Plaintiff KRW 3,000,000,000 and the delay damages thereon as part of the employee invention compensation calculated by reflecting the Plaintiff's inventor contribution rate and other factors in the employer's profits that the Defendant obtained or will obtain from 2006 to 2028 by virtue of the Plaintiff's Inventions at Issue.

3. Accrual of the Right to Claim Employee Invention Compensation

Article 40(1) of the former Patent Act (before amendment by Act No. 7869 of March 3, 2006; hereinafter "former Patent Act")[1] provides that "where an employee, etc. has caused an employer, etc. to succeed to the right to obtain a patent for an employee invention or to the patent right to an employee invention, or has established an exclusive license therefor, pursuant to a contract or employment regulations, the employee, etc. shall have the right to receive reasonable compensation."

According to the Basic Facts above, the Plaintiff's Inventions at Issue were made in connection with the Plaintiff's duties, in a field falling within the scope of the Defendant's business, while the Plaintiff

1) Article 40 of the former Patent Act was deleted upon the establishment of provisions on employee invention compensation by the amendment of the Invention Promotion Act on March 3, 2006.

was employed by and working as an employee of the Defendant, the employer; they therefore constitute employee inventions of an employee, etc. as provided in Article 40(1) of the former Patent Act. Accordingly, since the Plaintiff assigned the right to obtain patents for the Inventions at Issue to the Defendant, the employer, and thereby caused patent applications to be filed and patents to be registered in the Defendant's name, the Defendant is obligated to pay the Plaintiff reasonable compensation for the Inventions at Issue pursuant to Article 40(1) and (2) of the former Patent Act.

4. Calculation of the Employee Invention Compensation

A. Method of Calculation

1) Article 40(2) of the former Patent Act provides that, in determining the amount of compensation for an employee invention, "the amount of profit that the employer, etc. will obtain from the invention and the degree to which the employer, etc. and the employee, etc. contributed to the completion of the invention shall be taken into account." Accordingly, the factors that must generally be considered in calculating the amount of compensation for an employee invention are ① the profit the employer will obtain, ② the inventor's contribution rate (= 1 − the employer's contribution rate), and ③ the co-inventors' contribution ratio.

Here, the profit the employer will obtain from an employee invention means a profit that has a proximate causal relationship with the employee invention. In principle, reasonable compensation should be determined by taking as the basis for calculating compensation the profit that the employer is reasonably expected to obtain in the future from the employee invention, assessed as of the time the employer succeeded to the employee invention from the employee. However, because it is difficult to determine compensation by projecting the profit the employer will obtain in the future from the employee invention, where the employer has actually obtained a profit from the

employee invention after succeeding to it, such profit may be taken into account in calculating the profit the employer will obtain from the employee invention. Where, as such, the profit the employer will obtain from the employee invention is calculated by taking into account the profit actually obtained after the employer succeeded to the employee invention, and the reasonable compensation to be received by the employee is determined on that basis, it is necessary to consider not only the degree to which the employer and the employee contributed to the completion of the employee invention, but also circumstances arising after its completion, such as the course of obtaining rights in, or commercializing, the employee invention in relation to the profit the employer will obtain (see Supreme Court Decision 2023Da237514, decided November 20, 2024).

2) Where an employee invention is one of many patented inventions that are the subject of a license agreement, or was presented as a representative patent during the negotiation of the license agreement, or where, even if not, there are circumstances warranting special weight with respect to the profit derived from its practice, the proportion accounted for by the employee invention in such profit must be taken into account, and this is reflected as the "employee invention contribution rate." Because the contribution rate of the employee (the inventors) means the degree to which the inventors creatively contributed to completing the invention concerned, in calculating it, both the employer's contributing factors and the employee's contributing factors must be comprehensively considered. In addition, where multiple inventors jointly made an invention, the degree of contribution among the inventors must also be taken into account.

3) Accordingly, where an employer has licensed a third party to practice an employee invention, the resulting income such as royalties constitutes, absent special circumstances, excess income obtained by the employer on the basis of the employee invention; the compensation

for the employee invention may therefore be calculated by reflecting the degree of employee invention contribution to the consideration such as royalties. The formula for calculating the compensation is as follows.

Reasonable employee invention compensation = ① the employer's profit (royalties, etc.) × employee invention contribution rate × ② the inventors' contribution rate (= 1 − the employer's contribution rate) × ③ the Plaintiff's contribution ratio among the co-inventors

B. The Employer's Profit

1) Profit Related to Royalties Received or Receivable from Each Patent Pool: USD 50,535,000

A) Method of Calculating the Employer's Profit

It is undisputed between the parties that the Patented Inventions at Issue were included in each patent pool, and that the licensees of each patent pool paid royalties to the pool while the Defendant received from each patent pool a distribution of the portion of those royalties corresponding to the standard essential patents it held. Furthermore, the royalties the Defendant has received from each patent pool by providing the Patented Inventions at Issue thereto constitute a monopolistic and exclusive profit arising from the employee inventions, and thus constitute the employer's profit that forms the basis for calculating the employee invention compensation.

However, the evidence showing the royalties distributed to the Defendant from each patent pool covers 2007 through 2020 for DVD 6C and 2012 through 2021 for One-Blue. Accordingly, for the royalties distributed or to be distributed from DVD 6C for 2021 onward and from One-Blue for 2022 onward, a procedure is required to reasonably estimate them based on the number and patent terms of the Defendant's patented inventions comprising each patent pool.

In addition, because the "profit the employer will obtain," which

forms the basis for calculating the employee invention compensation, is a profit having a proximate causal relationship with the employee invention, the royalties distributed or to be distributed to the Defendant from each patent pool must be limited to the scope having a proximate causal relationship with the Patented Inventions at Issue; and because each patent pool includes other standard essential patents of the Defendant in addition to the Patented Inventions at Issue, the proportion accounted for by the Patented Inventions at Issue — that is, the contribution of the employee invention — must be reflected.

B) Royalty Income Received or Receivable from Each Patent Pool

(1) It is undisputed between the parties that the Defendant received as royalties the amounts set forth in the following table from DVD 6C from 2007 to 2020 and from One-Blue from 2012 to 2021. Furthermore, considering the terms of the patent rights, the number of the Patented Inventions at Issue included in each patent pool gradually decreases over time, and the Defendant's royalty income may accordingly be viewed as decreasing in proportion to that number. Estimating future royalty income on the basis of the 2020 royalty income for DVD 6C and the 2021 royalty income for One-Blue yields the figures set forth in the table below. Neither the Plaintiff nor the Defendant disputes this method of estimation or its results.[2)]

Year	DVD 6C Royalty Income		One-Blue Royalty Income	
	Amount (USD)	Remarks	Amount (USD)	Remarks
2007	5,366,176	Plaintiff's Exhibit No. 24	-	
2008	1,498,091			
2009	1,003,278			
2010	20,168,913			
2011	9,007,457			
2012	8,758,238		13,988,077	Plaintiff's Exhibit No. 25
2013	263,880		9,514,890	
2014	244,524		8,154,061	

2) Amounts of less than one dollar are disregarded. The same applies hereinafter.

Year	DVD 6C Royalty Income			One-Blue Royalty Income		
	Amount (USD)	Remarks		Amount (USD)	Remarks	
2015	274,048			5,969,314		
2016	648,069			4,170,813		
2017	985,433			4,732,098		
2018	474,728			4,029,156		
2019	318,762			4,257,628		
2020	146,064		26 patents	3,530,015		
2021	73,032		13 patents	2,734,952		838 patents
2022	67,414		12 patents	2,653,360		813 patents
2023	22,471	Estimated	4 patents	2,255,192		691 patents
2024	5,617		1 patent	1,031,317		316 patents
2025	5,617		1 patent	270,883	Estimated	83 patents
2026	-			84,854		26 patents
2027	-	Patent term expired		42,427		13 patents
2028	-			3,263		1 patent
Total	**USD 49,331,812**			**USD 67,422,300**		

(2) Accordingly, the royalties that the Defendant received or is reasonably expected to receive from DVD 6C for the period from 2007 to 2025 total USD 49,331,812, and those received or reasonably expected to be received from One-Blue for the period from 2012 to 2028 total USD 67,422,300.

C) The Portion of the Royalty Income Received or Receivable from Each Patent Pool Found to Have a Proximate Causal Relationship with the Inventions at Issue: 80%

In light of the following circumstances, which are established by the evidence cited above, the statements in Defendant's Exhibits Nos. 12 and 13, and the overall purport of the pleadings and oral arguments — namely, that the value of the Inventions at Issue increased after their completion owing to the Defendant's contribution — it is reasonable to find that the profit having a proximate causal relationship with the Inventions at Issue, out of the royalty income the Defendant received or will receive from each patent pool, is 80% thereof: that is, USD 39,465,449 (= USD 49,331,812 × 80%) of the DVD 6C royalty income and USD 53,937,840 (= USD 67,422,300 × 80%) of the One-Blue royalty income.

(1) The Patented Inventions at Issue are inventions conforming

to standard technologies adopted through votes of member companies at international standardization organizations such as the DVD Forum and the BDA. In order to secure patented inventions conforming to such standard technologies — that is, standard essential patents — one must become a member of the standardization organization and attend its meetings; must collect and analyze information in real time during the standardization process and develop and file applications for technologies with the potential to be adopted as standards in a timely manner; and must be able to secure acceptance of one's position in the course of discussions at the standardization organization. Such abilities mostly stem from the Defendant's standing and capabilities rather than from the individual inventors, and it appears that the Defendant invested substantial human and material resources in order to acquire such standing and capabilities.

(2) The DVD Forum was formed around 1995, primarily by Japanese companies led by Toshiba, and the Defendant joined the DVD Forum around November 1997, after the core standard technologies had largely been established. Accordingly, by the time the Defendant joined as a member company, most of the core standard technologies for DVDs had already been adopted in line with the technologies of those Japanese companies, and the Defendant and other member companies had to identify areas where standardization had not yet been completed, or to anticipate future standardization trends and develop technologies accordingly. The BDA was likewise established under the leadership of Sony, the Japanese company that developed BD, so the core standard technologies appear to have been adopted largely in line with Sony's technologies, and the Defendant, as with the DVD Forum, had to secure standard essential patents through strategic technology development.

Accordingly, the Defendant made organizational investments and substantial efforts to secure standard essential patents, such as by having the Plaintiff and other employees of the relevant departments

consistently attend meetings held by the DVD Forum, the BDA, and others so as to monitor developments within the organizations and set the direction of technology development accordingly. It also appears that the Defendant worked to have its own technologies, including the Inventions at Issue, selected as standard technologies through negotiations with member companies, such as by exercising influence in the standardization voting process and coordinating the relevant interests.

(3) As a result of these efforts and other factors, the 56 Inventions at Issue resulted in a total of 1,133 standard essential patent registrations. By securing such a large number of standard essential patents, the Defendant was able to increase its royalty income and strengthen its standing in the industry.

(4) For the foregoing reasons, the entirety of the royalty income the Defendant received or will receive from each patent pool cannot be regarded as "the employer's profit having a proximate causal relationship with the Inventions at Issue." Comprehensively considering the various circumstances apparent from the record and the course of the pleadings — including the degree of the Defendant's contribution, as discussed above, up to the point at which the Inventions at Issue became standard essential patents, and the Defendant's efforts regarding the filing and registration of the Inventions at Issue — 80% of the royalty income the Defendant received or will receive from each patent pool may be recognized as the employer's profit having a proximate causal relationship with the Inventions at Issue.

D) The Contribution of the Inventions at Issue: DVD 6C 63.95%, One-Blue 46.9%

According to the statements in Plaintiff's Exhibit No. 23 and the overall purport of the pleadings and oral arguments, it is found that since 2013 the Defendant has used "SIPMS," an electronic system that comprehensively manages the status of its researchers' employee inventions; that the system assigns a grade to each employee invention according to its technical value; and that it also records the royalty

income (A) allocated to each patented invention that the Defendant succeeded to and registered. The patent pool royalty income and the amounts allocated to the Patented Inventions at Issue that the Defendant recorded in SIPMS each year appear to have been directly calculated, entered, and managed by the Defendant itself in accordance with internal criteria it established on its own, and there are no circumstances casting doubt on the recorded contents, such as arbitrary preparation or subsequent alteration of entries.

A calculation of the share of royalty income allocated to the Patented Inventions at Issue as recorded in SIPMS (A) within the royalty income the Defendant received from each patent pool from 2013 to 2020 (B) shows that, as set forth in the table below, the allocated royalty income approximately took up 63.95% of the royalties for DVD 6C and approximately 46.9% for One-Blue, and it is reasonable to regard these as the contribution of the Inventions at Issue. Neither the Plaintiff nor the Defendant disputes determining the contribution in this manner.

Year	Average Exchange Rate (KRW/ USD)	DVD 6C			One-Blue		
		Royalty Income (Plaintiff's Exhibit No. 13)		Royalty Income Allocated to the Patented Inventions at Issue [KRW (A)] (Plaintiff's Exhibit No. 23)	Royalty Income (Plaintiff's Exhibit No. 14)		Royalty Income Allocated to the Patented Inventions at Issue [KRW (A)] (Plaintiff's Exhibit No. 23)
		USD	KRW (B)		USD	KRW (B)	
2013	1,084	263,880	286,045,920	176,659,664	9,514,890	10,314,140,760	4,564,602,117
2014	1,043	244,524	255,038,532	143,537,313	8,154,061	8,504,685,623	3,729,249,815
2015	1,121	274,048	307,207,808	146,954,714	5,969,314	6,691,600,994	3,054,439,462
2016	1,149	648,069	744,631,281	338,684,247	4,170,813	4,792,264,137	2,169,826,991
2017	1,119	985,433	1,102,699,527	846,945,688	4,732,098	5,295,217,662	2,964,079,914
2018	1,090	474,728	517,453,520	340,335,994	4,029,156	4,391,780,040	2,362,720,295
2019	1,155	318,762	368,170,110	297,126,602	4,257,628	4,917,560,340	2,219,769,647
Total		**3,209,444**	**3,581,246,698**	**2,290,244,222**	**40,827,960**	**44,907,249,556**	**21,064,688,241**
Proportion		**63.95% (2,290,244,222 / 3,581,246,698)**			**46.90% (21,064,688,241 / 44,907,249,556)**		

E) Sub-conclusion

Of the royalties the Defendant received from the above patent pools by virtue of the Patented Inventions at Issue, USD 50,535,000 [= USD

25,238,154 (USD 39,465,449 of the DVD 6C royalty income × 63.95%) + USD 25,296,846 (USD 53,937,840 of the One-Blue royalty income × 46.9%)] is recognized as the employer's profit forming the basis for calculating the employee invention compensation.

2) Profit Arising from the Cross-License Agreements at Issue: USD 324,571,790

The court now turns to the additional royalty income the Defendant received from its counterparties under the Cross-License Agreements at Issue and the profit it obtained by practicing the counterparties' patents free of charge.

A) Additional Royalty Income Received Through the Cross-License Agreements at Issue

It is undisputed between the parties that the Cross-License Agreements at Issue that the Defendant entered into with Hitachi, Philips, Lite-On, and Panasonic, respectively, included, in addition to the mutual free use of the patents and other rights each party held, provisions under which the Defendant would receive certain amounts as additional royalties, and that the Defendant accordingly received additional royalties from Hitachi, Philips, Lite-On, and Panasonic as follows.

Year	Counterparty	Additional Royalties (USD)
2006	Hitachi	7,500,000
2009	Lite-On	22,000,000
2010	Philips	35,300,000
2013	Hitachi	200,000,000
2014	Panasonic	38,000,000
Total		**302,800,000**

As set forth above, the additional royalties of USD 302,800,000 that the Defendant received from the counterparties to the Cross-License Agreements at Issue by providing them with the Patented Inventions at

Issue constitute a monopolistic and exclusive profit arising from the employee inventions, and thus constitute the employer's profit forming the basis for calculating the employee invention compensation.

B) Royalty Exemption Benefit Received from Each Patent Pool

(1) Summary of the Parties' Arguments

(a) The Plaintiff

The benefit of exemption from royalty payments that the Defendant obtained under the Cross-License Agreements at Issue was quantified by the amounts (Credit Amount, Prenet) that each patent pool deducted from the royalties payable by the Defendant on account of the existence of the Cross-License Agreements at Issue. Accordingly, the deduction amounts of each patent pool constitute the employer's profit referred to in the context of employee invention compensation.

(b) The Defendant

The Cross-License Agreements at Issue are entered into based on strategic business judgment concerning the counterparty company, and are not entered into in consideration of the importance of the individual patented inventions that are the subject of the cross-license. That is, because there is no causal relationship between the individual patented inventions subject to the cross-license and the execution of the cross-license agreement, even if the Patented Inventions at Issue are included among the patented inventions subject to the cross-license, the Defendant need not pay employee invention compensation with respect thereto.

Even if an obligation to pay employee invention compensation based on the royalty exemption amounts arising from the Cross-License Agreements at Issue were recognized, the Defendant's profit as an employer should not be calculated on the basis of deduction amounts such as the "Credit Amount" or "Prenet" that each patent pool arbitrarily calculated and notified; rather, it should be calculated on the basis of the Defendant's sales related to the practice of the patented inventions concerned and a reasonable and appropriate ordinary royalty

rate for those patented inventions.

(2) Calculation of the Royalty Exemption Benefit Received from Each Patent Pool

(a) Facts Found

Comprehensively considering the evidence cited above, the statements in Plaintiff's Exhibits Nos. 4, 26, 27, 29, and 30, and the overall purport of the pleadings and oral arguments, the following facts are found.

① From around 2003, the Defendant entered into the Cross-License Agreements at Issue, which comprehensively granted mutual licenses with respect to DVD- and BD-related patent rights and other rights, including the Patented Inventions at Issue, and thereafter joined each patent pool. Among the counterparties to the Cross-License Agreements at Issue, Toshiba, JVC, Mitsubishi, and Sharp are members of DVD 6C; Philips and Sony are members of One-Blue; and Hitachi and Panasonic are members of both DVD 6C and One-Blue.

② Under the rules of each patent pool, the pool member companies entered into an agreement (Authorization Agreement) whereby they granted a specific company, as administrator, the authority to enter into sublicense agreements for standard essential patents with licensees, and the administrator would, following such sublicense agreements, collect royalties from the licensees and distribute them to the member companies. However, under the above agreement, a licensee (for example, the Defendant in this case) had the right, with respect to royalties for the patents of a pool member company with which it had separately entered into a cross-license agreement, to request the administrator to adjust that portion of the total royalties calculated as payable to the patent pool so as to reflect the cross-license terms (to utilize adjustment arrangement). Accordingly, in calculating the royalties payable by the Defendant to each patent pool, each pool first calculated the royalties for all standard essential

patents based on the production and sales volumes of the Defendant's products practicing the patents, and then determined the final royalties payable by the Defendant to each pool by deducting the portion corresponding to the royalty equivalent for the standard essential patents held by the counterparties to the Cross-License Agreements at Issue. Each patent pool notified its members, including the Defendant, of the portion of the royalties payable by members that was deducted on account of the Cross-License Agreements at Issue, designating it as the "Credit Amount" in the case of DVD 6C and as "Prenet" in the case of One-Blue (both the "Credit Amount" and "Prenet" are referred to as the "deduction amount").

DVD 6C

(executed January 2, 2006; Plaintiff's Exhibit No. 29-2)

This Agreement sets forth the conditions under which the "Licensor" grants the "Licensee" a credit against the royalties (the "Royalties") payable under the "DVD Patent License Agreement," in order to reflect the existence of a patent cross-license (the "Cross-License") entered into between the "Licensee" and one or more members of the "DVD Patent Licensing Group" and covering all "DVD Patents" (as defined in the "DVD Patent License Agreement") and all patents owned by the Licensee that would have constituted "DVD Patents" had they been owned by a member of the "DVD Patent Licensing Group."

1. The "Licensor" shall appoint an independent accounting firm (the "Accountant") to send credit notices specifying the credit amount, if any, that the "Licensee" may apply against the "Royalties" (calculated pursuant to Article 4 of this Agreement).
2. If the "Licensee" wishes to utilize the adjustment arrangement specified herein, the "Licensee" shall, by the last day of the half-year period for which it wishes to apply this adjustment arrangement, notify the "Accountant" of the material terms of the "Cross-License" necessary for the "Accountant" to determine the credit amount.
3. Within 45 days from the last day of each half-year period, the "Licensee" shall submit to the "Licensor" the royalty statement specified in Section 2.13 of Attachment 2 to this "DVD Patent License Agreement." In such royalty statement, the "Licensee" shall indicate whether it wishes a royalty credit in connection with the "Cross-License" to be applied in accordance

with the royalty adjustment arrangement specified herein.

4. Within 75 days from the last day of each half-year period, the "Accountant" shall send to the "Licensee" a credit notice stating the credit amount that, by reason of the existence of the "Cross-License," may be applied (if the "Licensee" so elects) against the "Royalties" payable by the "Licensee" for the period concerned, and shall send a copy thereof to the "Licensor." Such credit amount shall be that portion of the royalties which, but for the "Cross-License," would have been distributed to the member or members of the "DVD Licensing Group" that licensed their patents to the "Licensee" under one or more "Cross-Licenses," after deducting the license administration fee and the allocated share of the "Accountant" fee.

One-Blue

(executed December 20, 2011; Plaintiff's Exhibit No. 30-1)

Attachment F Royalty Distribution Rules

XV. Pre-netting Deduction

The aggregate amount distributed to each "Licensor's" "Patents" with respect to "BD Products" shall be reduced by an amount corresponding to the "Total Pre-netting Deduction" under the bilateral license with such "Licensor" with respect to such "BD Products."

License Agreement for BD-PC Manufacturers

(executed December 30, 2011; Plaintiff's Exhibit No. 30-2)

6.2 Royalty Offset.

Where the "Licensee" is a party to a license agreement or covenant not to sue that separately licenses the "Licensed Patents" of one or more "Licensors" (the "Bilateral Agreement Licensors") covering the "Licensed Products," under an agreement other than this "License Agreement" (a "Bilateral Agreement"), the "Licensee" may request the "Licensing Company" to adjust the royalties payable under this "License Agreement" (calculated on the basis of the "Standard Rate" or the discounted "Standard Rate" applied under Section 6.3), by deducting therefrom an amount equal to the royalties that would, but for such agreement, be payable to the relevant "Bilateral Agreement Licensor" under the "Bilateral Agreement."

③ The deduction amounts of which the Defendant was notified by DVD 6C from the second half of 2013 through 2017 and by One-Blue from 2012 through April 2019 are as follows.

Period	DVD 6C Deduction Amount (USD)		One-Blue Deduction Amount (USD)	
	Amount	Remarks	Amount	Remarks
2012			35,599,428	Plaintiff's Exhibit No. 27
2013			54,974,011	
	2,543,736	Plaintiff's Exhibit No. 26		
2014	6,103,120		55,925,319	
2015	4,616,815		49,753,439	
2016	3,442,726		41,091,229	
2017	547,629		26,633,281	
2018			15,307,558	
2019			872,960	

(b) Whether the Deduction Amounts May Be Regarded as a Royalty Exemption Benefit

Comprehensively considering the facts established above, the evidence cited above, and the following circumstances, which are established by the overall purport of the pleadings and oral arguments, it is reasonable to find that the Defendant obtained the benefit of being relieved of royalty obligations in the amount of the deduction amounts of each patent pool by reason of the Cross-License Agreements at Issue.

① Under the sublicense agreement entered into with the administrator, the Defendant bears the obligation to pay royalties on all pool member companies' patents practiced by the Defendant. Furthermore, each patent pool calculates, in accordance with its royalty distribution rules, the royalties for all standard essential patents practiced by the Defendant based on the production and sales volumes of the Defendant's products embodying the patents.

② In order for the Defendant to obtain from each patent pool a deduction of the royalties for the standard essential patents held by the counterparties to the Cross-License Agreements at Issue, it must inform each pool of the existence of those agreements and request an adjustment of the royalties already calculated. Moreover, DVD 6C

requires that the deduction amount be calculated through an independent accounting firm appointed by the licensor, and the accounting firm's fees incurred in that process are deducted from the royalties distributed to the licensor.

③ In addition, in the case of DVD 6C, the members agreed to follow basic rules under which royalties are calculated according to an essentiality factor, a country factor, a term factor, and the like, in order to determine a fair and equitable distribution of royalties. The royalties calculated by the patent pool may therefore be regarded as reasonable royalties derived by an objective method. Further, considering that the licensor is required to appoint an independent accounting firm when the deduction amount is calculated, that the licensee is required to notify the appointed accounting firm of the material terms of the cross-license agreement and to submit a royalty statement, and that the accounting firm sends a credit notice prepared on that basis to the licensor and the licensee, the credit amount constituting the deduction amount appears to be the same amount as the royalties calculated by the patent pool.

④ Ultimately, because the Defendant was relieved of royalty obligations to each patent pool that had already accrued, by reason of the Cross-License Agreements at Issue, this in itself constitutes a profit to the Defendant.

⑤ The Defendant asserts that the deduction amounts of each patent pool are notional figures calculated under the unilateral policy of each pool for computational convenience in calculating royalties, and thus cannot be immediately regarded as the Defendant's profit. However, as discussed above, the Defendant's royalty obligations to each patent pool were objectively computed and actually accrued; the deduction amounts of each patent pool therefore constitute the Defendant's Royalty Exemption Benefit. The Defendant's assertion cannot be accepted.

(c) Specific Calculation

① Method of Calculation

It is undisputed that the Defendant and most of the parties to the Cross-License Agreements at Issue joined each patent pool, and that DVD 6C, from around 2007, and One-Blue, from 2012, notified the Defendant of deduction amounts reflecting the mutual royalty exemptions arising from the Cross-License Agreements at Issue through their respective Royalty Deduction Schemes. However, the Defendant has disclosed only the data on the deduction amounts notified by DVD 6C from the second half of 2013 through 2017 and by One-Blue from 2012 through April 2019, and asserts that it does not possess data by which the DVD 6C deduction amounts for the period from 2007 through the first half of 2013 could be confirmed. Accordingly, the DVD 6C deduction amounts for the above period, for which there are no data, must be estimated by a reasonable method.

② DVD 6C Deduction Amounts from 2007 Through the First Half of 2013

ⓐ Considering the following circumstances, which are established by the evidence cited above and the overall purport of the pleadings and oral arguments — namely, that the royalties paid to and the deduction amounts from each patent pool for a given period are calculated on the basis of the actual sales volumes of the Defendant's products as reported by the Defendant to each pool, so that a certain correlation appears to exist between them, and that during a period in which the DVD industry was continuing to grow it may be surmised that standard essential patents and the like were practiced more actively — the DVD 6C deduction amounts for the period from 2007 through the first half of 2013, when the DVD industry was booming, may be estimated by applying the ratio between the royalties paid to DVD 6C and the DVD 6C deduction amounts for the same period in 2013 and 2014, around the time the DVD industry began its relative decline, for which objective data have been submitted. Accordingly,

the ratio of the deduction amounts to the DVD 6C royalties paid for the second half of 2013 and the first half of 2014, for which data have been submitted, is calculated, and the deduction amounts for the above period are then estimated from the royalties the Defendant paid from 2007 to 2013.

Comprehensively considering the evidence cited above and the overall purport of the pleadings and oral arguments, the royalties the Defendant paid to DVD 6C and the Credit Amounts deducted by DVD 6C under the invoices issued on September 13, 2013 and March 13, 2014 are as set forth in the following table, and the ratio between the royalties the Defendant paid to DVD 6C and the DVD 6C deduction amounts during this period is calculated as 12:88.

Invoice Issuance Date	Royalties Paid by the Defendant (Plaintiff's Exhibit No. 31)	Deduction Amount (Plaintiff's Exhibit No. 26)
September 13, 2013	USD 517,321	USD 2,543,736
March 13, 2014	USD 232,138	USD 2,953,353
Total	USD 749,459	USD 5,497,089
Ratio	12%	88%

Applying the above ratio to the USD 17,198,133 in royalties the Defendant paid to DVD 6C from 2007 through the first half of 2013, the DVD 6C deduction amount for that period is estimated at USD 126,143,882.

Period	Royalties Paid by the Defendant (Plaintiff's Exhibit No. 31)	Deduction Amount (Estimated)
March 19, 2007–March 15, 2013	USD 17,198,133	USD 126,143,882 (= 17,198,133 × 5,497,089/749,459)
Ratio	12%	88%

ⓑ In response, the Defendant asserts that the deduction amounts for the period from 2007 through the first half of 2013 should be presumed to be the same as the deduction amount for 2014. However, considering that the DVD 6C deduction amounts show a trend of

gradual decline between 2014 and 2017; that the Defendant's royalty income from DVD 6C averaged USD 6,580,862 per year from 2007 to 2013, approximately 14 times the annual average of USD 441,661 from 2014 to 2020; and that the DVD market appears to have progressively contracted from around 2011 with the growth of the BD market, the deduction amounts for the period from 2007 through the first half of 2013 are presumed to have been far larger in scale than the deduction amount for 2014. Accordingly, it is unreasonable to estimate the DVD 6C deduction amounts for the period from 2007 through the first half of 2013 as being the same as the amount for 2014, and the Defendant's assertion is therefore not accepted.

③ Results of the Calculation of Deduction Amounts by Patent Pool

<table>
<tr><th rowspan="2">Period</th><th colspan="2">DVD 6C Deduction Amount</th><th colspan="2">One-Blue Deduction Amount</th></tr>
<tr><td>Amount (USD)</td><td>Remarks</td><td>Amount (USD)</td><td>Remarks</td></tr>
<tr><td>2007</td><td rowspan="5">126,143,882</td><td rowspan="5">Estimated</td><td colspan="2" rowspan="5">No assertion by the Plaintiff</td></tr>
<tr><td>2008</td></tr>
<tr><td>2009</td></tr>
<tr><td>2010</td></tr>
<tr><td>2011</td></tr>
<tr><td>2012</td><td rowspan="6">35,599,428</td><td rowspan="8">Plaintiff's Exhibit No. 27</td></tr>
<tr><td>2013</td><td>2,543,736</td><td rowspan="5">Plaintiff's Exhibit No. 26</td><td>54,974,011</td></tr>
<tr><td>2014</td><td>6,103,120</td><td>55,925,319</td></tr>
<tr><td>2015</td><td>4,616,815</td><td>49,753,439</td></tr>
<tr><td>2016</td><td>3,442,726</td><td>41,091,229</td></tr>
<tr><td>2017</td><td>547,629</td><td>26,633,281</td></tr>
<tr><td>2018</td><td>-</td><td rowspan="3">No assertion by the Plaintiff</td><td>15,307,558</td></tr>
<tr><td>2019</td><td>-</td><td>872,960</td></tr>
<tr><td>2020</td><td>-</td><td>-</td><td>No assertion by the Plaintiff</td></tr>
<tr><td>Subtotal</td><td colspan="2">143,397,908</td><td colspan="2">280,157,225</td></tr>
<tr><td>Total</td><td colspan="4">423,555,133</td></tr>
</table>

④ Royalty Exemption Benefit

The Royalty Exemption Benefit the Defendant obtained from each patent pool is equal to the deduction amounts of each pool and therefore amounts to USD 423,555,133.

C) Royalty Exemption Amounts with Respect to Philips, Sony, and Pioneer

(1) The Plaintiff asserts that, in addition to the deduction amounts above, the Defendant was relieved of paying royalties that it would otherwise have had to pay by practicing the DVD patents of Philips, Sony, and Pioneer free of charge under the Cross-License Agreements at Issue, so that this too constitutes the employer's profit forming the basis for calculating the employee invention compensation; that such royalty exemption amount may be calculated by multiplying the Defendant's DVD product sales volumes from 2006 to 2016 and BD player sales volumes from 2006 to 2012 by the ordinary royalty rate set by "DVD 3C" (hereinafter "DVD 3C"), the patent pool to which Philips, Sony, and Pioneer belong, and by the proportion of the standard essential patents held by Philips, Sony, and Pioneer within DVD 3C; and that, considering that the DVD 3C royalty rate was always higher than the DVD 6C royalty rate, the minimum such amount equals USD 126,143,882, the amount of royalties from which the Defendant was exempted by DVD 6C from 2007 to 2013.

(2) As discussed above, the Defendant entered into the Cross-License Agreements at Issue with Philips, Sony, and Pioneer, the principal content of which was the comprehensive grant of mutual licenses with respect to DVD-related patents and other rights. However, in light of the following circumstances, which are established by the statements in Plaintiff's Exhibit No. 42 and the overall purport of the pleadings and oral arguments, the evidence submitted by the Plaintiff alone is insufficient to find that the Defendant obtained a Royalty Exemption Benefit as asserted by the Plaintiff; and even if the Defendant did obtain such a benefit, it cannot be calculated by the method the Plaintiff asserts. The Plaintiff's assertion therefore cannot be accepted.

(a) Apart from the fact that the Cross-License Agreements at Issue were entered into, there is no direct evidence sufficient to find

that the Defendant practiced the DVD-related patents of Philips, Sony, and Pioneer in order to manufacture DVD products.

(b) Nor are there data by which the quantities of DVD products or BD players sold by the Defendant could be ascertained.

The Plaintiff asserts that the quantities of DVD players and DVD recorders the Defendant sold from 2006 to 2016 and of BD players sold from 2006 to 2012 can be ascertained from Plaintiff's Exhibit No. 40. Plaintiff's Exhibit No. 40 is a research report prepared by Fujiwara-Rothchild, Ltd. on February 5, 2024, under the title "Optical disc driver Market 2006-2016"; considering that it was prepared in 2024, eight years after 2016, the end of the period covered, that it does not state the basis or method by which the sales quantities were derived, and considering its form and content in other respects, it is difficult to regard this research report as highly credible.

(c) Moreover, the Cross-License Agreements at Issue are all comprehensive cross-license agreements, and they appear to have been entered into upon comprehensive consideration of various technical and managerial factors — not only the value of the licensed patents, but also the parties' business scale, sales, standing and influence in the relevant technical field, market changes before and after the execution of the agreements, and the relationships between the parties. Accordingly, even if the Defendant practiced the relevant patents of Philips, Sony, and Pioneer free of charge by reason of the above cross-license agreements, the entirety of the resulting profit cannot be said to have a proximate causal relationship with the Patented Inventions at Issue, and there is no other basis on which to calculate the profit having such a proximate causal relationship.

(d) Even if, as the Plaintiff asserts, the Defendant obtained a profit by practicing the DVD patents of Philips, Sony, and Pioneer free of charge, DVD 3C is a patent pool for DVD technology formed in 1998 by Philips, Sony, and Pioneer, which the Defendant never joined; there is therefore no basis for applying the ordinary royalty

rate set by DVD 3C to the Defendant.

D) The Portion of the Profit Arising from the Cross-License Agreements at Issue Found to Have a Proximate Causal Relationship with the Inventions at Issue: 75%

(1) The "profit the employer will obtain" from the Cross-License Agreements at Issue is limited to the portion of the "additional royalties received and royalties exempted" under those agreements that has a proximate causal relationship with the Inventions at Issue.

(2) As discussed above, the Defendant made a substantial contribution from the completion of the Inventions at Issue up to the securing of numerous standard essential patents, and the Defendant was thereby able to strengthen its standing in the industry.

In addition, considering the following circumstances, which are established by the evidence cited above, the statements in Defendant's Exhibits Nos. 4, 9, and 10, and the overall purport of the pleadings and oral arguments — namely, the purpose for which the Cross-License Agreements at Issue were entered into and the Defendant's influence in the process of entering into them — it is reasonable to find that the portion of the profit the Defendant obtained through those agreements having a proximate causal relationship with the Inventions at Issue is the portion corresponding to 75% of USD 726,355,133 (= USD 302,800,000 + USD 423,555,133), the sum of the additional royalties (USD 302,800,000) and the deduction amounts calculated by each patent pool (USD 423,555,133) — that is, USD 544,766,349.

(a) Cross-license agreements are entered into for differing or combined purposes in a wide variety of situations: where a party needs the other party's technology in order to fully practice its own, or where the technologies are in such a blocking relationship that the party cannot use its own technology without infringing the other party's rights; where the technologies are in such a complementary

relationship that products and services cannot be distributed in the market without access to the other party's technology, and the party therefore wishes to practice the technology held by the other party; where a party wishes to forestall the possibility of disputes arising from patent infringement and the like; or where a party wishes to establish a continuing cooperative relationship with the other party. In light of the timing of the Cross-License Agreements at Issue and the subject matter and content of those agreements, they may be regarded as having been entered into in consideration of various circumstances, including the purpose of lowering the risk of damages for patent infringement by allowing the competing companies to practice one another's patents and other rights freely at a time when the DVD and BD markets were growing and expanding; and on the evidence submitted by the Plaintiff alone, it is difficult to conclude that "securing additional royalty income for the patents held by the Defendant" or "the free use of patents held by the counterparties" was the principal purpose.

(b) It appears that the Defendant's competitiveness and position in the industry, which was tied to the tangible and intangible assets it then held, played a very important role in the execution of the Cross-License Agreements at Issue. Considering ① that the Defendant held a total of 12,438 patents relating to optical devices as of March 24, 2022, the majority of which were filed and registered between the late 1990s and the early 2000s; ② that around 2010 the Defendant's Blu-ray players held a market share of at least 24% in all major world markets, including North America, Europe, and Latin America, as well as Korea; ③ that the counterparties to the Cross-License Agreements at Issue were globally well-known corporations in the electronics industry, such as Hitachi, Panasonic, Toshiba, Mitsubishi, Sharp, Philips, Sony, JVC, Lite-On, and Pioneer; ④ that the Defendant repeatedly entered into agreements with this small group of companies over long periods, generally ranging from

10 to 18 years; and ⑤ that around 2004 the Defendant established "TSST," a joint venture with Toshiba dedicated to the development and marketing of the two companies' optical devices such as DVDs — it may be found that the Defendant was able to enter into the Cross-License Agreements at Issue because it held considerable standing and influence in the industry at the time.

(c) Accordingly, the entirety of the additional royalty income and Royalty Exemption Benefit the Defendant obtained through the Cross-License Agreements at Issue cannot be regarded as the "profit the employer will obtain" having a proximate causal relationship with the Inventions at Issue, and the portion attributable to factors other than the Inventions at Issue must be excluded. Comprehensively considering the various circumstances apparent from the record and the course of the pleadings — including the degree of the Defendant's contribution, as discussed above, up to the point at which the Inventions at Issue became standard essential patents, the Defendant's efforts regarding the filing and registration of the Inventions at Issue, the purpose for which the Cross-License Agreements at Issue were entered into, and the influence the Defendant exerted in the process of entering into them — 75% of the additional royalty income and Royalty Exemption Benefit the Defendant obtained through the Cross-License Agreements at Issue may be recognized as the employer's profit having a proximate causal relationship with the Inventions at Issue.

E) The Contribution of the Inventions at Issue: 59.58%

The patents and other rights that are the subject of the Cross-License Agreements at Issue comprehensively include, in addition to DVD or BD standard essential patents such as the Patented Inventions at Issue, the DVD-, BD-, and CD-R/RW-related patents held by the Defendant. Accordingly, in order to identify the profit attributable to the Inventions at Issue out of the additional royalty income and the Royalty Exemption Benefit, the proportion accounted for by the Patented

Inventions at Issue among the patents and other rights subject to the Cross-License Agreements at Issue — that is, the contribution rate of the employee invention — must be taken into account (= additional royalty income and Royalty Exemption Benefit arising from the cross-license agreements × employee invention contribution rate).

Considering the following circumstances, apparent from a comprehensive consideration of the evidence cited above and the overall purport of the pleadings and oral arguments, it is reasonable to regard the contribution of the Inventions at Issue among the patents and other rights for which additional royalties were paid as 59.58%. Moreover, the agreements under which the Royalty Exemption Benefit was obtained and those under which additional royalties were received are for the most part included within the Cross-License Agreements at Issue and cover the same patents and other rights, so the proportion accounted for by the Inventions at Issue in those agreements may be regarded as the same; it is therefore reasonable to set the contribution of the Inventions at Issue with respect to the Royalty Exemption Benefit at 59.58% as well.

(1) The Cross-License Agreements at Issue include all patents relating to optical devices held by the Defendant at present or in the future. Although the Patented Inventions at Issue were selected as standard essential patents, there are no data to find that the value of the patents and other rights covered by the agreements, including the Patented Inventions at Issue, was assessed differently for execution of the Cross-License Agreements at Issue or the arrangements concerning additional royalties, or data by which their shares could be inferred. Nor is there any evidence that the Patented Inventions at Issue were representative patents of the Defendant at the time each license agreement was entered into, that they were presented in order to lead the negotiations favorably, or that the counterparties entered into the agreements solely for the purpose of using the Patented Inventions at Issue in particular.

(2) The Defendant has organized and managed data relating to employee invention compensation through SIPMS, and as discussed above, that data is highly reliable. Accordingly, the "royalty income attributable to the Patented Inventions at Issue as acknowledged by the Defendant itself," ascertained from the SIPMS data, may be used as the basis for calculating the proportion accounted for by the Patented Inventions at Issue.

(3) Accordingly, as with the patent pool royalties discussed above, the calculation refers to the ratios that the Defendant itself calculated and applied in making distributions, and is made on the basis of the payments from 2013 onward, for which specific details are ascertained through SIPMS. These are summarized in the table below.

Year	Exchange Rate (KRW/USD)	Royalty Income (USD)	Royalty Income (KRW)	Royalty Income Allocated to the Patented Inventions at Issue (KRW)	
				Hitachi	Panasonic
2013	1,084	200,000,000 (Hitachi)	216,800,000,000	93,658,733,276	
2014	1,043	38,000,000 (Panasonic)	39,634,000,000	9,158,015,746	15,634,927,237
2015				7,248,631,560	10,934,811,453
2016				9,359,080,785	
2017				6,812,388,560	
Subtotal		238,000,000	256,434,000,000	126,236,849,927	26,569,738,690
				Subtotal: 152,806,588,617	
Proportion	**59.58%** (152,806,588,617 / 256,434,000,000)				

As confirmed in the table above, converting into Korean won, at the average exchange rate for each relevant year, the additional royalties the Defendant received through the Cross-License Agreements at Issue entered into with Hitachi in 2013 and with Panasonic in 2014 yields a total of KRW 256,434,000,000. The additional royalties the Defendant allocated to the Patented Inventions at Issue amount to KRW 152,806,588,617. Calculating on this basis the ratio of the royalty

income the Defendant allocated to the Patented Inventions at Issue to the additional royalty income the Defendant received yields 59.58% (= 152,806,588,617 ÷ 256,434,000,000).

F) Sub-conclusion

Of the portion of the profit the Defendant obtained through the Cross-License Agreements at Issue having a proximate causal relationship with the employee inventions, USD 324,571,790 (= USD 544,766,349 × 59.58%) is recognized as the employer's profit forming the basis for calculating the employee invention compensation.

3) Determination on the Plaintiff's Additional Assertions

The Plaintiff asserts, in substance, that ① the royalties the Defendant received from Hitachi from 2007 to 2013, before entering into the cross-license agreement with Hitachi on March 13, 2013, and ② the balancing payment the Defendant did not receive from Toshiba should also be reflected as profits obtained by the Defendant. However, the Plaintiff has not even specifically identified the amount of each such profit, and the evidence submitted by the Plaintiff alone is insufficient to find that the Defendant obtained a Royalty Exemption Benefit as asserted by the Plaintiff; the Plaintiff's assertion therefore cannot be accepted.

4) Total Employer's Profit

The employer's profit forming the basis for calculating the employee invention compensation in this case is USD 375,106,790 (= USD 50,535,000 of the royalties the Defendant received or will receive from each patent pool + USD 324,571,790 of the profit the Defendant obtained through the Cross-License Agreements at Issue).

C. The Inventor's Contribution Rate: 3%

1) Because the contribution rate of the employee (the inventor)

means the degree to which the inventor creatively contributed to completing the invention concerned, in calculating it, both the employer's contributing factors and the employee's contributing factors must be comprehensively considered. Specifically, all circumstances relating to the degree to which the employer and the employee contributed to the completion of the employee invention concerned must be comprehensively considered, including ① the circumstances leading to the invention and the process of its development, ② the inventor's educational background, career, and technical skills, ③ whether and to what extent the employer provided human and material support, and ④ the related technologies or patents, research facilities, and materials held by the employer.

2) Comprehensively considering the following facts and circumstances, apparent from the evidence cited above, the statements in Plaintiff's Exhibit No. 19 and Defendant's Exhibit No. 5, and the overall purport of the pleadings and oral arguments — namely, the degree to which the Plaintiff's individual capabilities, such as knowledge and educational background, contributed to the completion of the Inventions at Issue, and the human and material support provided by the Defendant for the Inventions at Issue — the Plaintiff's contribution rate for the Inventions at Issue is set at 3%.

A) The Plaintiff joined the Defendant in December 1985, before completing a bachelor's degree in the Department of Electronic Engineering at Pusan National University in February 1986, and from around 1994 performed research and development and standardization work relating to DVD, BD, and the like for the Defendant.

The Plaintiff asserts, in substance, that the Plaintiff was able to complete the Inventions at Issue in particular on the basis of the Plaintiff's specialized knowledge and more than ten years of experience with digital signal processing systems generally. However, the Plaintiff held only a bachelor's degree and had no research experience in the relevant field before joining the Defendant. It appears that the Plaintiff

acquired the knowledge relating to the Inventions at Issue only after joining the Defendant and working as a researcher, and the more than ten years of experience with digital signal processing systems generally that the Plaintiff asserts was ultimately obtained in the course of performing duties for the Defendant in accordance with the Defendant's work instructions. Moreover, the Inventions at Issue total 56, all of which, apart from 4, are joint inventions of the Defendant's employees, and there are no circumstances suggesting that the Plaintiff contributed particularly more than the other co-inventors to the completion of those inventions.

B) The Plaintiff received from the Defendant the Patent King Award in 1986 and the Silver Technology Medal in 1998 as a group commendation for standardization activities. The Plaintiff also received the Prime Minister's Award twice, in 1995 and 1999, for continuous patent filings, was selected as an in-house honorary doctor in 2002, and was promoted to executive in 2008.

C) It appears that the Defendant assembled a research team of considerable size and invested enormous development funds in order to develop DVD and BD technologies and products.

Meanwhile, it does appear that the Plaintiff attended meetings held by the DVD Forum, the BDA, and others, and in that process identified technical items amenable to standardization and completed the Inventions at Issue together with other employees of the Defendant. However, as discussed above, it is reasonable to find that what played an important role in setting the direction of technology development and in the process of adopting standard essential patents was the Defendant's organizational investment and substantial efforts, as well as the Defendant's standing and capabilities enabling it to persuade the major member companies; and on the data submitted alone, it is difficult to find that there was a special individual contribution by the Plaintiff in the process of adopting the standard essential patents, as the Plaintiff asserts.

D. The Plaintiff's Contribution Ratio Among the Co-Inventors: 38.4%

Considering the following circumstances, which are established by the evidence cited above and the overall purport of the pleadings and oral arguments, the Plaintiff's contribution ratio among the co-inventors of the Inventions at Issue is set at 38.4%.

1) The Defendant's SIPMS system records the Plaintiff's share in each Patented Invention at Issue as an equal share based on the total number of inventors (that is, 100% for an invention with one inventor, 50% for an invention with two, and 25% for an invention with four).

2) Assuming that the contribution of each of the Patented Inventions at Issue is identical, the average of the Plaintiff's share ratios for the Patented Inventions at Issue may be calculated by summing the Plaintiff's share ratios for the individual patented inventions confirmed in the SIPMS data and dividing by the number of patented inventions.

3) Assuming that the contribution of each individual patented invention making up the Patented Inventions at Issue is identical, the average of the Plaintiff's share ratios in the Patented Inventions at Issue may be calculated by summing the Plaintiff's share ratios for the individual patented inventions confirmed in the SIPMS data and dividing by the number of patented inventions. It is reasonable to regard 38.4%, the average value of the Plaintiff's share ratios so calculated, as the Plaintiff's contribution ratio, and neither the Plaintiff nor the Defendant particularly disputes determining the contribution ratio in this manner.

E. Calculation of the Reasonable Compensation

1) Applying the inventor's contribution rate of 3% and the Plaintiff's contribution ratio among the co-inventors of 38.4% to the employer's profit of USD 375,106,790, which forms the basis for

calculating the employee invention compensation for the Inventions at Issue, yields USD 4,321,230 (= USD 375,106,790 × 3% × 38.4%); the reasonable compensation is therefore calculated within the amount obtained by converting the said amount into Korean won. However, a question arises as to the reference exchange rate to be applied with respect to the employer's profit from royalties received or royalty obligations exempted each year, which is calculated in foreign currency.

2) A claim for employee invention compensation is a statutory claim, and a statutory claim is construed as arising in the currency of the country to which the governing statute belongs; a claim for employee invention compensation under the former Patent Act is therefore a Korean won claim. Even if the employer obtained profits in foreign currency by reason of the employee invention, the character of the claim for employee invention compensation as a Korean won claim does not change unless it was agreed, under employee invention compensation regulations or an agreement between the employer and the employee, that the corresponding compensation would be paid in foreign currency (see Supreme Court Decision 2023Da287168, decided November 14, 2024). Accordingly, the employer may be regarded as having obtained a profit in Korean won corresponding to the value of the royalties received in foreign currency converted at the exchange rate prevailing at the time of receipt, and the employee inventor holds a claim for employee invention compensation as a Korean won claim based on such profit of the employer.

On the other hand, however, in light of the fact that, in calculating compensation for an employee invention, reasonable compensation is determined by reflecting various factors in the employer's profit that arose subsequently and applying the subsequent profit back to the time of succession, it is reasonable to find that, where the employer obtained profits such as royalties in foreign currency over a number of years and the exchange rate fluctuated during that period, the court

may calculate the profit on a Korean won basis by an appropriate method, such as by applying the annual average exchange rates during that period or the average exchange rate over the entire period.

3) The amount equivalent to the reasonable compensation calculated above on a foreign currency basis is converted into Korean won by applying KRW 1,135, the average of the annual average exchange rates from 2006 to 2024, in consideration of the period during which the employer's profit arose; and the resulting converted amount of KRW 4,904,596,050 (= USD 4,321,230 × KRW 1,135) is set as the reasonable compensation.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Average
Exchange Rate	945	920	1,095	1,263	1,144	1,097	1,115	1,084	1,043	1,121	1,149	1,119	1,090	1,155	1,168	1,134	1,281	1,295	1,353	**1,135**

4) According to Plaintiff's Exhibit No. 23 and the overall purport of the pleadings and oral arguments, it may be found that the Defendant paid the Plaintiff KRW 2,598,909,911 as compensation for the Inventions at Issue. Accordingly, deducting the compensation already paid by the Defendant from the above compensation leaves KRW 2,305,686,139 (= KRW 4,904,596,050 − KRW 2,598,909,911) (the Plaintiff asserts that approximately KRW 600,000,000 of the compensation already paid was paid as salary or long-term performance compensation and therefore should not be deducted, but there is no evidence to support this).

F. Sub-conclusion

The Defendant is obligated to pay the Plaintiff KRW 2,305,686,139 as compensation for the Inventions at Issue, together with the delay damages calculated as follows: on KRW 2,141,987,047 thereof, which is the amount awarded in the judgment of the first instance, at the rate of 5% per annum prescribed by the Civil Act from June 19, 2020, the day following the date of service of a copy of the complaint in this case as sought by the Plaintiff, until December 14, 2023, the date of

the judgment of the first instance, up to which it is deemed reasonable for the Defendant to dispute the existence and scope of the obligation to perform; on KRW 163,699,092, additionally awarded by this court, at the rate of 5% per annum prescribed by the Civil Act from June 19, 2020, the day following the date of service of a copy of the complaint in this case, until July 24, 2025, the date of this decision, up to which it is deemed reasonable for the Defendant to dispute the existence and scope of the obligation to perform; and, from the day following each of the said dates until full payment, at the rate of 12% per annum prescribed by the Act on Special Cases Concerning Expedition, etc. of Legal Proceedings.

5. Conclusion

Accordingly, the Plaintiff's claim in this case is well-founded within the scope recognized above and is therefore granted, and the remainder of the claim is without merit and must be dismissed. The judgment of the first instance, having reached a partly different conclusion, is unjustified; the Plaintiff's appeal is therefore granted in part, the judgment of the first instance is modified as set forth above, and the court renders its decision as set forth in the Order.

Presiding Judge Jaheun KU
Judge Young Gi KIM
Judge Jihwan NOH

IP HIGH COURT OF KOREA
TWENTY-THIRD DIVISION
DECISION

Case No.	2024Na10249 Damages (Other)
Plaintiff, Appellant	Aram Books Co., Ltd. Representative Director A Counsel for Plaintiff Attorney Yangsoo KIM
Defendant, Appellee	Smart Owl Co., Ltd. Representative: Inside Director B Counsel for Defendant Law Firm Tehran Attorney in Charge Yesong KIM
District Court's Decision	Seoul Central District Court Decision 2021GaHap588060, decided December 15, 2023
Date of Closing Argument	November 28, 2024
Decision Date	January 23, 2025

ORDER

1. The Plaintiff's appeal is dismissed.

2. The costs of the appeal shall be borne by the Plaintiff.

DEMAND FOR RELIEF

The judgment of the first instance shall be reversed. The Defendant shall pay to the Plaintiff KRW 63,650,000, together with interest calculated at the rate of 12 percent per annum from the day following the date of service of a copy of the application dated October 25, 2023 to amend the demand for relief and the cause of action until full

payment (explicit partial claim).

OPINION

1. Basic Facts

A. Status of the Parties, etc.

1) The Plaintiff is a company engaged in the wholesale and retail of books, publishing, and other businesses, and the Defendant is a company engaged in the retail of used books, book rental, and other businesses.

2) A, the Plaintiff's representative director, acquired the authors' economic rights from the original authors with respect to the books listed in the Appendix by assignment, including the "La La Land Complete Set (45 volumes)" (hereinafter "**Plaintiff's Books**"), and in or around September 2021 the Plaintiff acquired, from A, the claim for damages arising from infringement of the author's economic rights in the Plaintiff's Books.[1)]

B. The Defendant's Operation of the Book Rental Business

The Defendant operates a website called "Smart Owl (www.smartowl.co.kr)" (hereinafter "**Website at Issue**") and, through that website, rents out and sells children's books, including the Plaintiff's Books.

[Factual Basis] Undisputed facts; Plaintiff's Exhibits Nos. 1 through 4 (including all branch numbers where such numbers exist; the same applies hereinafter); the overall purport of the pleadings and oral arguments

1) This is not in dispute between the parties (see the minutes of the first oral hearing held before this Court).

2. Determination on the Copyright Infringement Claim

A. Determination on the Cause of Action

The Plaintiff asserts that the Defendant infringed the Plaintiff's right of reproduction, among the author's economic rights in the works concerned, by reproducing without authorization 842 covers and 115 inside pages of the Plaintiff's Books and posting them on the Website at Issue operated by the Defendant.[2)]

As discussed above, the Plaintiff was assigned the claim for damages by A arising from infringement of the author's economic rights in the Plaintiff's Books, and the Defendant admits that it posted 842 covers and 62 inside pages of the Plaintiff's Books (collectively, the "**Works at Issue**") on the Website at Issue.

According to the facts found above, absent special circumstances, the Defendant is obligated to compensate the Plaintiff for the damages caused by the infringement of the right of reproduction in the Plaintiff's Books.

---

2) It is not in dispute between the parties that the Defendant used all of the covers of the Plaintiff's Books and that the covers of the Plaintiff's Books so used numbered 884 (see page 2 of the Defendant's brief dated November 12, 2024). The number of covers used by the Defendant, 884, is not consistent with 842, which is the total number of volumes of the Plaintiff's Books listed in the appendix to the judgment of the first instance. This appears to be attributable to differences as to whether 'supplementary components' were included, depending on the set, in the course of the court of first instance's preparation of the appended list of the Plaintiff's Books. However, as discussed above, as it is not in dispute between the parties that the Defendant used every cover of the Plaintiff's Books, the precise number of covers is difficult to regard as a material circumstance in this action; and since the Plaintiff stated before this Court to the effect that it identifies each of the books in the appendix to the judgment of the first instance as a book of which the reproduction right was infringed, the number of covers of the Plaintiff's Books used by the Defendant is taken to be "842," which corresponds to the total number of volumes of the sets listed in the appendix to the judgment of the first instance.

B. Determination on the Defendant's Defense of Fair Use

1) Relevant Legal Principles

In determining whether the act of using a work falls under "a case that does not conflict with the ordinary exploitation of the work and does not unreasonably prejudice the legitimate interests of the author," as provided in Article 35-5(1) of the Copyright Act, the factors non-exhaustively enumerated in each subparagraph of paragraph (2) of the same Article—"the purpose and character of the use (subparagraph 1)," "the type and purpose of the work (subparagraph 2)," "the amount and substantiality of the portion used in relation to the work as a whole (subparagraph 3)," and "the effect of the use of the work upon the current or potential market for or value of the work (subparagraph 4)"—must be comprehensively considered, and matters not enumerated in those subparagraphs, such as the circumstances and manner of the use, may also be considered as factors in the determination. As to "the purpose and character of the use (subparagraph 1)," consideration may be given to whether the use goes beyond merely substituting for the original work and transforms it so as to convey a new expression, meaning, or message; whether it has a purpose and character distinct from the original work; whether the degree of transformation of the original work exceeds the level required for the creation of a derivative work; and whether the use is for public-interest or non-profit purposes. As to "the type and purpose of the work (subparagraph 2)," consideration is given to whether the original work is one of a factual or informational character and whether it has been made public or published; and as to "the amount and substantiality of the portion used in relation to the work as a whole (subparagraph 3)," consideration may be given to whether the quantitative proportion or qualitative significance of the portion used is low relative to the original work as a whole, and whether the user used it only to the necessary extent. As to "the effect of the use of the work upon the current or potential market for or value of the work (subparagraph 4)," consideration must

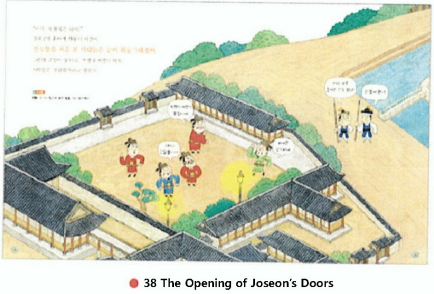
be given to whether there is no or little risk that the use of the work will substitute for the current market demand for the original work or its derivative works, or for the ordinary market demand that is reasonably likely to develop in the future, or will impair its market value (see Supreme Court Decision 2021Da272001, decided July 11, 2024, etc.).

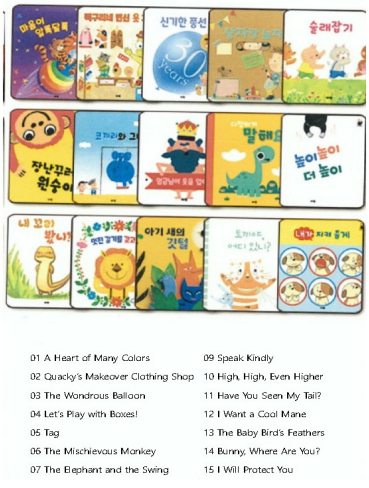
C. Specific Determination

According to the following facts and circumstances, which are established by the evidence cited above, and the statements and images in Plaintiff's Exhibits Nos. 8, 9, 10, and 12, as well as the overall purport of the pleadings and oral arguments, in light of the legal principles discussed above, it is reasonable to find that the Defendant's act of posting the Works at Issue contained in the Plaintiff's Books on the Website at Issue, in the course of operating its book rental business, constitutes fair use under Article 35-5 of the Copyright Act.

1) The Purpose and Character of the Use

A) The Defendant appears to have used the Works at Issue by posting them on the Website at Issue without particular transformation, as shown below.

Example of Cover Use (Plaintiff's Exhibit No. 4-1)	Example of Inside-Page Use (Plaintiff's Exhibit No. 4-1)
	

Example of Cover Use (Plaintiff's Exhibit No. 4-1)	Example of Inside-Page Use (Plaintiff's Exhibit No. 4-1)
	

However, the Plaintiff's Books rented out by the Defendant are primarily intended for children, and in the case of such books, not only the title, theme, and storyline but also the coloring and texture, the mood of the design, and the typeface and font size constitute important considerations for selection; and one cannot fully describe those elements if one cannot use the works in those books at all. Accordingly, there was a need for the Defendant to use the Works at Issue, and in light of the above purpose for which the Defendant used them, it is reasonable to find that the Defendant's use of the Works at Issue without particular transformation was likewise unavoidable in certain respects.

B) Furthermore, the Defendant makes profit and derives revenue mainly from book rental, and the Defendant's use of the Works at Issue was incidental to its principal business of book rental; it is therefore reasonable to find that the Defendant's use of the Works at Issue itself only had a limited commercial character.

Moreover, Article 35-3(2)1 of the former Copyright Act (before amendment by Act No. 14083 of March 22, 2016) originally provided

for “the purpose and character of the use, including whether it is of a commercial or non-commercial nature” as a factor to be considered in fair use determination; however, upon the amendment of the Copyright Act, the phrase “including whether it is of a commercial or non-commercial nature” was deleted from the provision to the same effect. In this regard, the reasons for the amendment state: “The fair use provision should serve the important purpose of developing culture and related industries by promoting the use of works in various fields; however, its purposes and considerations are currently limited, making it difficult to achieve that purpose, and it therefore needs to be reorganized.” This appears to reflect the legislative intent to give less weight to the commercial character of a use in determining fair use. Accordingly, the commercial character of the Defendant’s use of the Works at Issue should be given less weight.

2) The Type and Purpose of the Work

A) The Works at Issue are contained in the Plaintiff’s Books published by the Plaintiff and thus constitute published works; the Defendant’s act of making them public by its use of the Works at Issue cannot therefore be regarded as contrary to the intent of the authors of the Works at Issue.

B) Although the Plaintiff’s Books also contain fictional and creative elements, a substantial portion of them appear to have strong factual and informational elements as well, being adaptations made to convey to children, in an accessible manner, historical figures, widely known fairy tales or artistic works, scientific facts, and the like.

3) The Amount and Substantiality of the Portion Used in Relation to the Work as a Whole

A) Each of the Plaintiff’s Books the inside pages of which were used by the Defendant consists of approximately 30 to 40 pages, and the Defendant appears to have used only one or two of those

pages. Furthermore, the content of the inside pages used by the Defendant does not appear to convey the gist of the book concerned or to be a portion from which the entire content could be surmised; it therefore appears that readers would not be able to easily grasp the literary work of the book containing those inside pages as a whole only from the content of the inside pages used by the Defendant.

B) The Defendant appears to have posted the entire covers of the Plaintiff's Books on the Website at Issue, and absent special circumstances, the covers of the Plaintiff's Books may in themselves constitute independent artistic works. However, the share of the used portion in the work as a whole must be assessed not only quantitatively but also qualitatively; in particular, since the value of an artistic work inevitably varies greatly with the resolution at which it is displayed, resolution is an important qualitative element for artistic works. The Defendant appears to have posted the covers of the Plaintiff's Books on the Website at Issue not at their original resolution but at a substantially reduced one, and it is therefore difficult to find that the Defendant used the entire covers as they are in a qualitative sense.

C) Meanwhile, according to the images in Plaintiff's Exhibit No. 12, when the mouse cursor is placed over a cover posted on the Website at Issue, that cover does appear to be displayed at a relatively higher resolution than before. However, even according to that evidence, the resolution does not appear to improve greatly when the mouse cursor is placed over it, and it appears not to reach the original resolution.

4) The Effect of the Use of the Work Upon the Current or Potential Market for or Value of the Work

A) The Defendant's use of the Works at Issue does not appear likely to have a negative effect on the sales market, which is the current principal market related to the Plaintiff's Books. Rather, the possibility cannot be ruled out that the Defendant's use of the Works

at Issue served to introduce and publicize the Plaintiff's Books and thus had at least some positive effect on the sales of the Plaintiff's Books. Most of the circumstances on which the Plaintiff relies in asserting that it suffered damage from the Defendant's conduct appear to relate to a contraction of the sales market caused by the Defendant's act of renting out the Plaintiff's Books, rather than by the Defendant's use of the Works at Issue.

B) According to the statements in Plaintiff's Exhibits Nos. 8, 9, and 10, it is found that an online content market for the Works at Issue exists; however, in light of the content and scope of the Defendant's use of the Works at Issue as discussed above, the effect of the Defendant's use of the Works at Issue on the online content market for the Works at Issue does not appear to be significant.

D. Sub-conclusion

As set forth above, the Defendant's use of the Works at Issue constitutes "fair use" under Article 35-5 of the Copyright Act, and the Plaintiff's assertion is therefore ultimately without merit.

3. Conclusion

The Plaintiff's claim is without merit and must be dismissed; the judgment of the first instance, having reached the same conclusion, is justified, and the Plaintiff's appeal is therefore dismissed.

Presiding Judge Taeksoo JUNG
Judge Jaepil YUN
Judge Hyunjung SONG

Appendix

List of the Plaintiff's Books[3)]

No.	Title
1	La La Land Complete Set (45 volumes)
2	Aura Korean History Complete Set (45 volumes)
3	EYE Picture Book Simkung Complete Set (48 volumes)
4	Historical Figure Seminar, Biographies of Great Figures Complete Set (64 volumes)
5	Our Aram Complete Set (45 volumes)
6	Aram Science Task Force Complete Set (45 volumes)
7	Principle Science Dokkaebi Complete Set (54 volumes)
8	Aram Little Scientist Complete Set (70 volumes)
9	Magic Lamp World Classics Complete Set (65 volumes)
10	Banana World Original Stories Complete Set (62 volumes)
11	Very Smart Mr. Society Complete Set (88 volumes)
12	World Dagli Complete Set (48 volumes)
13	Aram Masterpiece Paintings Complete Set (48 volumes)
14	Kids Artium Complete Set (45 volumes)
15	Magic Jar Complete Set (70 volumes)

3) See the minutes of the first oral hearing held before this Court.

IP HIGH COURT OF KOREA
FIFTH DIVISION
DECISION

Case No.	2024Heo11507 Invalidation of Registration (Trademark)
Plaintiff	S&Food Co., Ltd. Representative Director A Counsel for Plaintiff Patent Attorney Kangmin LEE
Defendant	B Patent Firm Iroomlion, Patent Attorney in Charge Kyungho LEE
Date of Closing Argument	August 20, 2024
Decision Date	October 17, 2024

ORDER

1. The IPTAB Decision 2023Dang2735, decided March 8, 2024, shall be revoked.
2. Litigation costs shall be borne by the Defendant.

DEMAND FOR RELIEF

As ordered.

OPINION

1. Basic Facts

A. The Plaintiff's Registered Trademark at Issue

1) Mark: 

2) Filing Date of Application / Date of Decision to Register / Registration Date / Registration Number: April 22, 2019 / October 30, 2020 / November 25, 2020 / No. 1665940

3) Designated Goods: Cereal flour and preparations made from cereals, yeast, processed cereal foods, edible processed cereal foods, milled (搗精) grains, germinated grains, jang (醬) products, seasonings, sauces, snack foods made primarily of cereals, edible pastes made of cereal flour, fermented tea, processed coffee, tea (茶), beverages having tea as their main ingredient, bread, confectionery, and candy, in Class 30 of the classification of goods

B. Procedural History of the IPTAB Decision at Issue

1) On August 14, 2023, the Defendant filed with the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB"), against the Plaintiff, a petition for invalidation of the registration (hereinafter "Petition for Invalidation at Issue"), asserting that "① the Registered Trademark at Issue is intuitively perceived as meaning 'to eat conveniently' or 'to eat simply,' and its designated goods are products that can be conveniently consumed, so that the Registered Trademark at Issue constitutes a descriptive mark that directly describes the nature of the designated goods; ② the Registered Trademark at Issue is a trademark whose distinctiveness in distinguishing one's own goods from those of others is difficult to recognize under generally accepted social norms, or which it is inappropriate, in the public interest, to allow any particular person to monopolize; and ③ the Registered Trademark at Issue is a trademark whose mark and designated goods are similar to those of the prior registered trademark (잇츠심플). The registration of the Registered Trademark at Issue must therefore

be invalidated pursuant to Article 33(1)3 and Article 33(1)7 of the Trademark Act and Article 34(1)7 of the same Act."

2) The IPTAB heard the case under Case No. 2023Dang2735 and, on March 8, 2024, rendered an administrative decision invalidating the Registered Trademark at Issue (hereinafter "IPTAB Decision at Issue") on the grounds that "① the Registered Trademark at Issue is intuitively perceived as meaning 'to eat conveniently,' 'to eat simply,' and the like, and thus consists solely of a mark indicating, in a common manner, the use, method of use, and other characteristics of the designated goods, and thus it falls under Article 33(1)3 of the Trademark Act; and ② numerous applications for marks similar to the Registered Trademark at Issue have been rejected on the ground that they constitute marks lacking distinctiveness, and it is therefore inappropriate, in the public interest, to allow any particular person to use the Registered Trademark at Issue exclusively, and thus it falls under Article 33(1)7 of the Trademark Act. Accordingly, without need to examine whether it falls under Article 34(1)7 of the Trademark Act, the registration of the Registered Trademark at Issue must be invalidated."

[Factual basis] Undisputed facts; the statements in Plaintiff's Exhibits Nos. 1 and 2 and in Defendant's Exhibit No. 14; the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Defendant

The registration of the Registered Trademark at Issue "Simpleat" must be invalidated for the following reasons. The IPTAB Decision at Issue, which reached the same conclusion, is therefore lawful.

1) Article 33(1)1 of the Trademark Act

Where the Registered Trademark at Issue, which means a convenience

food, is used on snack foods made primarily of cereals (hereinafter "cereal snack foods") among the designated goods, it constitutes a "trademark consisting solely of a mark indicating the generic name of the goods in a common manner" as provided in Article 33(1)1 of the Trademark Act.

2) Article 33(1)3 of the Trademark Act

The Registered Trademark at Issue is a mark combining the easy English words "Simple" and "eat," and anyone can readily and intuitively perceive it as meaning "to eat simply," "convenience food," and the like. The Plaintiff itself has added to its packaging containers and website, alongside the Registered Trademark at Issue, phrases such as "convenience food enjoyed simply," and consumers have also written product reviews stating that they "eat it conveniently." In light of these circumstances, the Registered Trademark at Issue constitutes a "trademark consisting solely of a mark indicating, in a common manner, the quality, use, shape, and method of use of the designated goods" as provided in Article 33(1)3 of the Trademark Act.

3) Article 33(1)7 of the Trademark Act

Decisions of rejection have been rendered on numerous applications for trademarks similar to the Registered Trademark at Issue on the ground that they lack distinctiveness, and the Registered Trademark at Issue causes the concepts of "a convenient meal," "convenience food," and the like to be intuitively perceived; accordingly, not only can its distinctiveness in distinguishing one's own goods from those of others not be recognized under generally accepted social norms, but it is also inappropriate, in the public interest, to allow any particular person to monopolize it. The Registered Trademark at Issue therefore constitutes a "trademark from which consumers cannot identify whose business the goods indicated thereby are related to" as provided in Article 33(1)7 of the Trademark Act.

4) The First Clause of Article 34(1)12 of the Trademark Act

Where the Registered Trademark at Issue, meaning "convenience food" or "snack food," is used on foods that are not "convenience foods" or "snack foods"—such as jang products, yeast, seasonings, and sauces—or on their packaging, ordinary consumers are liable to be misled as to their quality, taking them to be "convenience foods" or "snack foods" upon seeing the Registered Trademark at Issue. The Registered Trademark at Issue therefore constitutes a "trademark liable to mislead consumers as to the quality of the goods" as provided in the first clause of Article 34(1)12 of the Trademark Act.

B. The Plaintiff

The Registered Trademark at Issue "Simpleat" is a coined word distinct from English expressions meaning "to eat simply" or "convenience food"; while the Registered Trademark at Issue may suggest to consumers the idea of "simplifying the act of eating," the Registered Trademark at Issue cannot be regarded as being intuitively perceived as "to eat simply" or "convenience food." Furthermore, the Registered Trademark at Issue functions as a brand indicating the source of the goods rather than their use, and thus has inherent distinctiveness; it does not fall under Article 33(1)1, 3, or 7 of the Trademark Act or the first clause of Article 34(1)12 of the Trademark Act. The IPTAB Decision at Issue, which reached a different conclusion, is therefore unlawful.

3. Determination

A. Whether Article 33(1)1 of the Trademark Act Applies

In light of the following circumstances, apparent from a comprehensive consideration of the facts found above, the evidence cited above, the statements in Plaintiff's Exhibits Nos. 3 through 19 and 21 and in Defendant's Exhibits Nos. 1, 2, 10, 11, and 15 through 20, and the overall purport of the pleadings and oral arguments, the evidence submitted by the Defendant alone makes it difficult to find that the

Registered Trademark at Issue is a trademark consisting solely of a mark indicating, in a common manner, the generic name of cereal snack foods, one of its designated goods, and there is no other evidence to support such a finding. The Defendant's assertion in this part is therefore without merit.

1) The Registered Trademark at Issue "Simpleat" is perceived as a whole as a coined word having no dictionary meaning, formed by combining "Simple" and "eat" and then omitting one "e" in the middle.

2) As examined in detail below, the Registered Trademark at Issue is not found to cause "to eat simply" or "convenience food" to be intuitively perceived from the mark itself, beyond suggesting that its designated goods "relate to something that can be eaten conveniently."

3) It does not appear that, as of October 30, 2020, the date of the decision to register the Registered Trademark at Issue, "Simpleat" was recognized or used as a generic name designating cereal snack foods.

B. Whether Article 33(1)3 of the Trademark Act Applies

1) Article 33(1)3 of the Trademark Act provides that "a trademark consisting solely of a mark indicating, in a common manner, the origin (産地), quality, raw materials, efficacy, use, quantity, shape, price, method of production, method of processing, method of use, or time of use of the goods may not be registered as a trademark." The purport of that provision is that such a mark is a descriptive mark designed to describe the characteristics of the goods and, in many cases, loses the function of distinguishing one's own goods from those of others; and that even where it does have the function of distinguishing goods, it is a mark that everyone needs when trading goods and allowing only a particular person to use it exclusively is inappropriate from the public interest standpoint. Whether

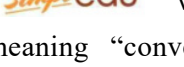
a trademark constitutes a descriptive mark under that provision must be determined objectively, taking into account the concept the trademark conveys, its relationship with the designated goods, marketplace realities, and other factors. Even where a trademark appears to suggest or emphasize the origin, quality, raw materials, efficacy, use, and the like of the designated goods, a trademark is not a descriptive mark if, in view of its overall composition, ordinary consumers or traders cannot perceive it as simply indicating the origin, quality, raw materials, efficacy, use, and the like of the designated goods. Moreover, in the case of a so-called composite trademark formed by combining two or more constituent parts, whether it has distinctiveness must be determined by viewing the constituent parts as a single whole (see Supreme Court Decision 2022Hu10128, decided June 30, 2022, etc.).

2) In light of the following circumstances, apparent from a comprehensive consideration of the facts found above, the evidence cited above, and the overall purport of the pleadings and oral arguments, the evidence submitted by the Defendant alone makes it difficult to find that the Registered Trademark at Issue constitutes a trademark consisting solely of a mark indicating, in a common manner, the quality, use, shape, and method of use of its designated goods, and there is no other evidence to support such a finding. The Defendant's assertion in this part is therefore without merit.

a) The Registered Trademark at Issue "" consists of eight letters of the alphabet, of which the leading "Simpl" is written in a bright orange cursive script and "eat" in a dark red block script; the letters are written consecutively without spacing; and the "Simpl" and "eat" parts are rendered at approximately the same size. When the Registered Trademark at Issue is pronounced in Korean, it becomes the three syllables "Sim-peul-it," a comparatively short pronunciation, and "simple" and "eat," which appear to be the individual words before combination, appear to have weak independent distinctiveness in relation to the designated goods of the Registered Trademark at Issue;

it is therefore reasonable to find that the Registered Trademark at Issue will be called and perceived by ordinary consumers only as "" (Simpleat)" as a whole.

b) As discussed above, the Registered Trademark at Issue is a coined word having no dictionary meaning, formed by combining "Simple" and "eat" and then omitting one "e" in the middle. The English word "Simple," as an adjective, has dictionary meanings such as "1. easy to understand (handle), basic, uncomplicated, plain," "2. not elaborate, unadorned, unostentatious, modest, unpretentious," and "3. unaffected, natural, sincere, candid, innocent," and, as a noun, meanings such as "1. an ignorant person, a simpleton" and "2. a single, or uncompounded entity"; and the English word "eat," as a transitive verb, has dictionary meanings such as "to consume … as food" and "to erode …," and, as an intransitive verb, meanings such as "to consume food" and "to erode."

c) In light of the prevalence of English education in Korea, ordinary consumers, upon seeing the Registered Trademark at Issue—which is grammatically incorrect and not commonly encountered—may indirectly call to mind "convenience food," meaning "food made so that it can be eaten conveniently" or "food cooked and eaten simply," by mechanically combining the dictionary meanings of "Simple" and "eat" discussed above and then going through a process of association or inference; however, beyond that, it does not appear that ordinary consumers encountering the Registered Trademark at Issue "" would be able to intuitively understand the mark as meaning "convenience food" or "food eaten simply." Accordingly, even taking into account the designated goods of the Registered Trademark at Issue, it is difficult to find that the Registered Trademark at Issue causes "convenience food" or "food eaten simply" to be intuitively perceived in relation to its designated goods.

d) Even though the Plaintiff used, on the packaging containers

and other parts of the actual products it sells using the Registered Trademark at Issue (hereinafter "Plaintiff's Products"), phrases emphasizing that the products are "food eaten conveniently" or "food eaten simply," that circumstance alone does not establish that the Registered Trademark at Issue causes ordinary consumers to intuitively perceive "convenience food" or "food eaten simply" in relation to its designated goods. Rather, there is ample room to view the Plaintiff as having conducted its business using such phrases in order to convey clearly to consumers what the Registered Trademark at Issue suggests. Moreover, even if consumers who actually purchased the Plaintiff's Products grasped the characteristics of those products as food eaten conveniently, this was based on their experience of purchasing and consuming the products that are "convenience foods," and that circumstance alone likewise does not establish that ordinary consumers encountering the Registered Trademark at Issue would intuitively associate "convenience food" or "food eaten simply" with the designated goods.

C. Whether Article 33(1)7 of the Trademark Act Applies

1) Article 33(1) of the Trademark Act provides, in subparagraph 7, as one of the cases in which trademark registration may not be obtained, "a trademark, other than those falling under subparagraphs 1 through 6, from which consumers cannot identify whose business the goods indicated thereby are related to." This means that even a trademark not falling under subparagraphs 1 through 6 of the same paragraph may not be registered if it cannot distinguish the source of one's own goods from that of another's goods. Whether a trademark constitutes a trademark lacking distinctiveness must be determined objectively, taking into account the concept the trademark conveys, its relationship with the designated goods, marketplace realities, and other factors; and a trademark lacks distinctiveness where its distinctiveness in distinguishing one's own goods from those of others is difficult to

recognize under generally accepted social norms, or where it is found inappropriate, in the public interest, to allow a particular person to monopolize that trademark (see Supreme Court Decision 2019Hu11794, decided May 14, 2020, etc.).

2) In light of the following circumstances, apparent from a comprehensive consideration of the facts found above, the evidence cited above, and the overall purport of the pleadings and oral arguments, the evidence submitted by the Defendant alone makes it difficult to find that the Registered Trademark at Issue constitutes a trademark from which consumers cannot identify whose business the goods indicated thereby are related to, and there is no other evidence to support such a finding. The Defendant's assertion in this part is therefore without merit.

a) As discussed above, the phrase "Simple eat" is grammatically incorrect and is not listed in dictionaries. Moreover, the Registered Trademark at Issue "" came to form a new word by omitting the spacing and dropping the "e" in the middle. In this respect, the word or phrase "simpleat" itself is recognized as having uniqueness and inherent creativity going beyond "simple" or "eat" and indeed beyond their mere combination, so that its distinctiveness cannot readily be denied.

b) As discussed above, "simple" and "eat" are English words with multiple meanings, and it is difficult to find that, when used as "simpleat" as in the Registered Trademark at Issue, it is intuitively perceived by ordinary consumers as a whole to mean "convenience food" or "food eaten simply."

c) There is no evidence whatsoever from which it could be found that the words "simpleat" or "simple eat," or the Korean word "심플잇," are widely recognized and used among ordinary consumers of the designated goods of the Registered Trademark at Issue as designating "convenience food" or "food eaten simply." Furthermore,

no circumstances are found from which it could be said that the distinctiveness of the Registered Trademark at Issue in distinguishing one's own goods from those of others is difficult to recognize under generally accepted social norms, or that it is inappropriate, in the public interest, to allow a particular person to monopolize that trademark.

D. Whether the First Clause of Article 34(1)12 of the Trademark Act Applies

1) A "trademark liable to mislead consumers as to the quality of the goods" under the first clause of Article 34(1)12 of the Trademark Act means a trademark whose composition itself is liable to mislead consumers into believing that the designated goods have characteristics different from those they inherently have; and whether a trademark is liable to give rise to a misconception as to quality must be determined in accordance with common practice in trade, taking ordinary consumers as the standard (see Supreme Court en banc Decision 2010Da103000, decided October 18, 2012, etc.).

2) The Registered Trademark at Issue is not found to enable ordinary consumers to intuitively perceive "convenience food" or "food eaten simply" from the mark beyond suggesting or emphasizing that the designated goods are such foods. Moreover, it is also difficult to conclude that the inherent characteristics of jang products, yeast, seasonings, sauces, and the like among the designated goods of the Registered Trademark at Issue are contradictory to or inconsistent with "convenience food" or "food eaten simply." Accordingly, the evidence submitted by the Defendant alone makes it difficult to find that the Registered Trademark at Issue constitutes a trademark liable to mislead consumers as to the quality of the goods, and there is no other evidence to support such a finding. The Defendant's assertion in this part is therefore likewise without merit.

E. Sub-Conclusion

Accordingly, there are no grounds for invalidating the Registered Trademark at Issue under Article 33(1)1, 3, or 7 of the Trademark Act or the first clause of Article 34(1)12 of the Trademark Act. The IPTAB Decision at Issue, which nonetheless reached a different conclusion, is unlawful.

4. Conclusion

Accordingly, the Plaintiff's claim in this case is well-founded and is therefore granted, and the court renders its decision as set forth in the Order (meanwhile, in light of the various circumstances examined above, the above determination is difficult to overturn even taking into account the contents of the Defendant's reference brief dated September 30, 2024 and its attachments, which were submitted to this court after the closing of oral arguments in this case).

Presiding Judge Youngwoo LIM
Judge Kisu KIM
Judge Joung Woon YUN

IP HIGH COURT OF KOREA
SECOND DIVISION
DECISION

Case No.	2024Heo12388 Scope of Rights Confirmation (Trademark)
Plaintiff	Cmix Co., Ltd. Representative: Inside Director A Counsel for Plaintiff Yulchon LLC, Attorneys in Charge Minseung KOO, Heewoo CHO Counsel for Plaintiff Patent Firm The Wave, Patent Attorneys in Charge Seuli CHO, Eunjung JIN Substitute Counsel Patent Attorney Chanmi KIM
Defendant	RiGO Trading S.A. Representative Director B Counsel for Defendant Patent Attorneys Jua SUNG, Heewon SEO Substitute Counsel Patent Firm WeThePeople, Patent Attorney in Charge Heonju KIM
Date of Closing Argument	January 17, 2025
Decision Date	February 14, 2025

ORDER

1. The IPTAB Decision 2023Dang831, decided April 9, 2024, shall be revoked.

2. Litigation costs shall be borne by the Defendant.

DEMAND FOR RELIEF

As ordered.

OPINION

1. Basic Facts

A. The Defendant's Registered Trademark at Issue (Plaintiff's Exhibits Nos. 3 and 4)

1) Filing Date of Application / Registration Date / Registration Number: June 8, 2015 / June 10, 2016 / No. 1183780[1)]

2) Nature of the Trademark Right: Three-dimensional trademark

3) Description of the Trademark: This three-dimensional trademark represents a "bear-shaped jelly," and the trademark specimen submitted depicts the shape in three-dimensional form.

4) Trademark Specimen:



5) Designated Goods: Confectionery in Class 30

B. The Plaintiff's Challenged Mark

1) Composition:



1) The trademark register states that it is "a trademark that has acquired distinctiveness through use as provided in Article 33(2) of the Trademark Act."

2) Used on: Jelly[2)]

C. Procedural History of the IPTAB Decision at Issue

1) On February 14, 2023, the Plaintiff filed with the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB"), against the Defendant, a petition for a negative trial to confirm the scope of rights, asserting that the Challenged Mark does not fall within the scope of rights of the Registered Trademark at Issue.

2) On April 9, 2024, the IPTAB rendered the IPTAB Decision at Issue dismissing the Plaintiff's petition, on the ground that "the Challenged Mark was used as a trademark performing a source-indicating function, and its mark and designated goods are similar to those of the Registered Trademark at Issue" (2023Dang831).

[Factual basis] Undisputed facts; the statements in Plaintiff's Exhibits Nos. 1 through 5 and Defendant's Exhibits Nos. 1 and 2; the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

1) The Challenged Mark was not used as a trademark.

2) The Challenged Mark differs from the Registered Trademark at Issue in its characteristic portions and is therefore not similar to it; it accordingly does not fall within the scope of rights of the Registered Trademark at Issue.

3) Leaving aside the mark "HARIBO," the Registered Trademark at Issue itself, being a particular bear shape, has not acquired distinctiveness

2) Strictly speaking these should be regarded as "gummies," but in everyday language "jelly" is also used as a broader concept encompassing gummies, and neither the Plaintiff nor the Defendant particularly distinguishes between them; they are therefore referred to collectively below as jellies.

through use; the Challenged Mark therefore falls under Article 90(1)2 and 3 of the Trademark Act.

B. The Defendant

1) The Challenged Mark was used as a trademark.

2) The Challenged Mark is similar to the Registered Trademark at Issue and therefore falls within the scope of rights of the Registered Trademark at Issue.

3) Not only can the distinctiveness of a trademark registered upon recognition of distinctiveness acquired through use not be denied in a trial for confirmation of the scope of rights, but the Registered Trademark at Issue was, at the time of the IPTAB Decision at Issue, a trademark whose distinctiveness acquired through use with respect to jellies was recognized.

3. Whether the IPTAB Decision at Issue Is Unlawful

A. Whether the Challenged Mark Was Used as a Trademark

1) Relevant Legal Principles

a) In a case involving a trial for confirmation of the scope of rights in a trademark, for a mark whose confirmation is sought to be said to fall within the scope of rights of a registered trademark, it is a prerequisite that the mark be used as a trademark (Supreme Court Decision 2006Hu2295, decided July 10, 2008).

b) Even where a mark identical or similar to another person's registered trademark has been used, if it is not used for the indication of source—which may be said to be the essential function of a trademark—but is used purely as a design or otherwise cannot be recognized as trademark use, it cannot be regarded as an act infringing the trademark right in the registered trademark; and in order to determine whether a mark is being used as a trademark, it must be

determined whether the mark as displayed is being used as a source identifier for the goods in actual trade, considering the relationship with the goods, the mode of use of the mark concerned, the well-known and famous status of the registered trademark, and the user's intent and the circumstances of use, and the like as a whole (see Supreme Court Decision 2004Do5034, decided October 15, 2004, and Supreme Court Decision 2011Da18802, decided January 24, 2013, etc.).

2) Facts Found

Considering together the statements or images in Plaintiff's Exhibits Nos. 6, 8, 9, 13 through 19, 23, 26 through 41, 50, 55, and 56 (including branch numbers; the same applies hereinafter) and Defendant's Exhibits Nos. 11 through 23, 27 through 46, 50, 51, and 52, facts readily known to this court, and the overall purport of the pleadings and oral arguments, the following facts are found.

ⓐ The Plaintiff is a company established on March 21, 2002 that sells confectionery (糖菓類) at online and offline stores under the trade name "Weeny Beeny." On its website, the Plaintiff introduces itself as follows: "Weeny Beeny is a Pick & Mix store where consumers purchase chocolate, candy, cookies, jellies, gummies, caramel, and the like in the quantities they want according to their varied preferences. It sells a total of around 500 items, including approximately 250 kinds of bulk products available for Pick & Mix, as well as individually packaged products and small items such as candy machines; all products are exclusively imported directly, with the finest products selected from the best companies in Europe (Germany, Belgium, Spain, Italy, Austria, the Netherlands, and others) and the United States." (Certified copy of corporate registration; Plaintiff's Exhibit No. 38.)

Views of the Plaintiff's offline store (Plaintiff's Exhibits Nos. 1, 15, and 39)



ⓑ The Plaintiff sells jellies in various shapes—including bear-shaped jellies such as those in the shape of the Challenged Mark, as well as cola bottles, worms, turtles, fruits, letters of the alphabet, hearts, and the like—as "bulk products available for Pick & Mix," placed in wrappers bearing the mark "Weeny Beeny®" or "Weeny Beeny®."

Jellies sold by the Plaintiff at its online store (Plaintiff's Exhibit No. 1)



Jellies sold at the Plaintiff's offline store (Plaintiff's Exhibit No. 39)



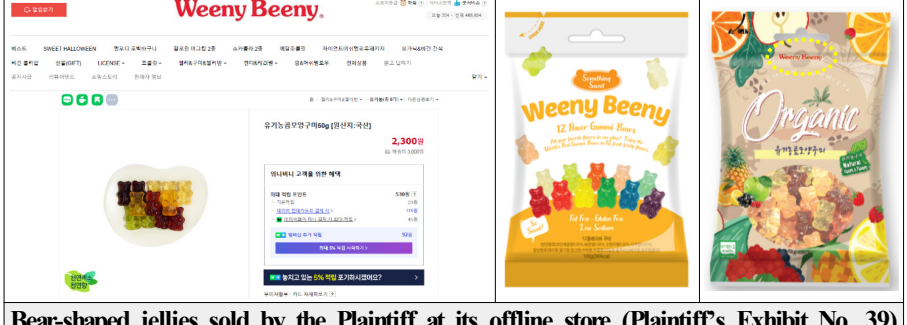
Packaging method of the Plaintiff's online store (Plaintiff's Exhibit No. 17)

Packaging method of the Plaintiff's offline store (Plaintiff's Exhibit No. 16)



ⓒ The Plaintiff sells various bear-shaped jellies, including those in the shape of the Challenged Mark, using phrases such as “organic bear-shaped gummies,” “big bear-shaped jelly,” “teddy bear-shaped gummies,” and “triple-color bear-shaped gummies” (other shapes are likewise sold using phrases such as “alphabet-shaped gummies”).

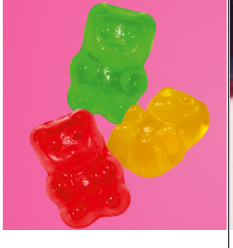
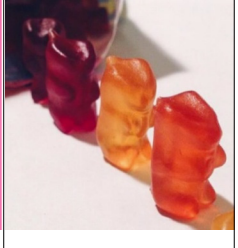
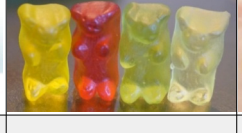
Bear-shaped jellies sold by the Plaintiff at its online store and packaging method (Defendant’s Exhibits Nos. 12, 18, and 19)



Bear-shaped jellies sold by the Plaintiff at its offline store (Plaintiff’s Exhibit No. 39)



ⓓ Before the filing date of the application for the Registered Trademark at Issue (June 8, 2015), various companies were selling the following bear-shaped jellies in Korea, including “Kkomagom (Little Bear),” released by “Crown Confectionery” in 1986 (the dates are confirmed dates of sale, such as “the date of creation of the internet posting containing the photograph concerned”).

<table>
<tr><td>Crown Confectionery Kkomagom (Little Bear)
(released 1986; Plaintiff’s Exhibit 8)</td><td>Trolli Classic Bears
(February 14, 2008;
Plaintiff’s Exhibit 27)</td><td>YummyEarth Gummy Bears
(January 4, 2010;
Plaintiff’s Exhibit 31)</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>Albanese Gummi Bears
(July 3, 2010; Plaintiff’s Exhibit 28)</td><td>Black Forest Gummy Bears (May 15, 2012;
Plaintiff’s Exhibit 32)</td><td>Pierrot Gourmand Gummy Bear
(February 26, 2013;
Plaintiff’s Exhibit 33)</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>Fundy Juicee Gummee Bear
(July 28, 2013;
Plaintiff’s Exhibit 37)</td><td>Leon Gummy Bear
(October 31, 2013;
Plaintiff’s Exhibit 9)</td><td>Rolly Polly Mini Bear
(February 6, 2014;
Plaintiff’s Exhibit 36)</td><td>Jealous Sweets Gummy Bear
(May 15, 2014;
Plaintiff’s Exhibit 30)</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Bebeto Funny Bears
(September 30, 2014;
Plaintiff’s Exhibit 29)</td><td>Good Stuff Koala Bears
(March 24, 2015;
Plaintiff’s Exhibit 34)</td><td>It’s Sugar Gummy Bears
(April 17, 2015;
Plaintiff’s Exhibit 35)</td><td>(For reference) Nestlé Frutips Mallang
(Defendant’s Exhibit 42)</td></tr>
</table>



ⓔ Meanwhile, the "HARIBO" trademark used by the Defendant was created on December 13, 1920 by C in Bonn, Germany, taking two letters each from his own name and from the name of the city where the company was established. "HARIBO" released the world's first gummy bear, named "Tanzbär" (dancing bear), in 1922, and in 1960 rebranded the "dancing bear" to release "GOLD-Bären," meaning "golden bears"; the shape of "GOLDBÄREN (Goldbären)" (bear-shaped jelly), finalized in 1978, has been maintained to this day (see Plaintiff's Exhibits Nos. 6 and 26 and Defendant's Exhibits Nos. 23, 34, 37, 39, 38, and 45, among others).[3]

ⓕ "HARIBO"[4] products are today sold in some 120 countries and include, in addition to the bear-shaped jellies on which the Registered Trademark at Issue is used ("GOLDBÄREN"),[5] jellies in

3) The judgment of the Higher Regional Court of Cologne (Plaintiff's Exhibit No. 26; OLG Köln, Urteil vom 02.10.2020 – 6 U 19/20, paragraph 3) and the judgment of the Regional Court of Cologne (Defendant's Exhibit No. 34; LG Köln, Urteil vom 23.08.2016 – 33 O 82/16, paragraph 2) found that "the shape settled upon in 1978 has been applied to the present day," and those findings of fact may be fully accepted.

4) Today it appears that HARIBO GmbH & Co. KG, the parent company, together with a number of subsidiaries and affiliates, forms the "HARIBO Group" (see Plaintiff's Exhibit No. 5 and Defendant's Exhibits Nos. 11, 13, and 22, among others), but they are referred to collectively as "HARIBO." The Defendant is the company that manages HARIBO's intellectual property rights (see Defendant's Exhibit No. 21).

5) In Korea, three-dimensional trademarks identical to the Registered Trademark at Issue (Nos. 1183778–783) and ordinary trademarks using only the front view thereof as the mark (Nos. 1166453–458) have been registered in six colors (red, vermilion, orange, yellow, green, and clear; Defendant's Exhibits Nos. 20 and 21).

various shapes such as cola bottles, worms, turtles, fruits, letters of the alphabet, and numerals (Defendant's Exhibits Nos. 11, 13, 38, and 45).

In Korea, even before formal importation began in 2016, "HARIBO" had 2014 sales of EUR 6,934,543 [amounts under one euro are rounded down (the same applies hereinafter); approximately KRW 9.7 billion],[6] of which sales of the above bear-shaped jellies were EUR 5,300,737 (approximately KRW 7.4 billion, about 76.4% of total sales); and in 2015 domestic sales were EUR 8,790,858 (approximately KRW 11.1 billion),[7] of which sales of bear-shaped jellies were EUR 6,966,719 (approximately KRW 8.7 billion, about 79.3% of total sales) (Defendant's Exhibit No. 15). "HARIBO" spent approximately KRW 15 billion on domestic television advertising from 2018 to 2024 (Defendant's Exhibit No. 32) and has maintained the top market share in the domestic "chewing food" market since 2016 (Plaintiff's Exhibit No. 6).

3) Specific Determination

In light of the legal principles discussed above and the facts found above, together with the following circumstances apparent from the statements or images in Plaintiff's Exhibits Nos. 10, 11, 12, 20, 21, 22, 44 through 48, and 51 through 54 and the overall purport of the pleadings and oral arguments, the Challenged Mark—one of the bear-shaped jelly forms sold at the Plaintiff's stores—was used only as a design, and cannot be regarded as having been used as a source identifier for the goods, that is, as a trademark.

a) At its online and offline "Weeny Beeny" stores, the Plaintiff sells jellies in various shapes—not only bears but also cola bottles, worms, fruits, hearts, and the like—placed in wrappers bearing the mark "Weeny Beeny." The Plaintiff distinguishes the jellies it sells

6) Calculated using the 2014 average base exchange rate of "KRW 1,398.81/EUR." The same applies hereinafter.

7) Calculated using the 2015 average base exchange rate of "KRW 1,255.78/EUR." The same applies hereinafter.

by directly indicating the "shape" of the jelly, and for bear-shaped jellies it uses phrases such as "organic bear-shaped gummies," "big bear-shaped jelly," "teddy bear-shaped gummies," and "triple-color bear-shaped gummies."

b) Even before the application for the Registered Trademark at Issue, various bear-shaped jellies of the Plaintiff and of a number of companies, including "HARIBO," had been released in Korea, and these were distributed and sold bearing their respective word marks—such as "Crown Confectionery" (Korea; the country of establishment is given in parentheses hereinafter), "Albanese" (United States), "Trolli" (Germany), and "Bebeto" (Türkiye)—so as to make it possible to distinguish one party's goods from another's.

c) Although "HARIBO's" bear-shaped jelly products appear to have been known to some extent among ordinary domestic consumers at the time of the IPTAB Decision at Issue, "HARIBO" sells jellies in various shapes—not only bears but also cola bottles, worms, turtles, fruits, letters of the alphabet, and the like—and all of these products also bore the word mark "HARIBO," as in ""; moreover, various bear-shaped jelly products of a number of companies were already in circulation in the trade. It is therefore difficult to find that ordinary consumers perceive bear-shaped jellies generally as indicating the Defendant's side ("HARIBO") as the source (the Defendant also made clear at the oral argument session of December 20, 2024 that "it is not asserting that all bear-shaped jellies fall within the Defendant's rights").[8] As discussed below, it is also difficult to find that the Defendant's Registered Trademark at Issue and the Plaintiff's Challenged Mark are similar.

4) Sub-conclusion

The Challenged Mark was not used as a trademark.

8) See the minutes of the first oral hearing held before this Court.

B. Whether the Challenged Mark Is Similar to the Registered Trademark at Issue

1) Relevant Legal Principles

In a trial for confirmation of the scope of rights in a trademark, whether a registered trademark and a challenged mark are similar must be determined by observing their appearance, pronunciation, and concept objectively, as a whole, and separately, and according to whether there is a likelihood of confusion or mistake as to the source of the goods, taking as the standard the intuitive perception that ordinary consumers have of the trademarks in the trade of the designated goods. In making such a determination, where use of the mark on the goods concerned is found, comprehensive and overall consideration must be given to the actual circumstances of trade surrounding those goods, such as the degree of recognition of the mark, its relationship with the goods, and how consumers call and perceive the mark (see Supreme Court Decision 2018Hu10848, decided August 14, 2019).

2) Specific Determination

In light of the following circumstances, apparent from a comprehensive consideration of the facts found above, the evidence cited above, and the overall purport of the pleadings and oral arguments, it is also difficult to find that the Challenged Mark is similar to the Registered Trademark at Issue.

a) Comparison of the Goods

"Confectionery," the designated goods of the Registered Trademark at Issue, is the same as or similar to the "jellies" on which the Challenged Mark was used. The gazette and the trademark register of the Registered Trademark at Issue state, in the "description of the trademark," that the Registered Trademark at Issue represents a "bear-shaped jelly."

b) Comparison of the Appearance of the Marks

Both the Registered Trademark at Issue and the Challenged Mark

depict a bear and thus share the same motif. However, the scope of rights of the Registered Trademark at Issue cannot extend to the motif of a "bear-shaped jelly" in general, and is confined to the specific manner of expression of the three-dimensional trademark.

On that premise, comparing the appearance of the Registered Trademark at Issue () and the Challenged Mark (), the two marks have in common that ① both depict a bear facing forward, ② two ears rise from the top of the head, ③ the nose portion protrudes forward, ④ short, blunt arms (forelegs) and legs (hind legs) protrude from the body, and ⑤ the two arms extend forward from the sides at the midpoint of the torso, among other points.

However, they differ in that ❶ the bear's ears, nose, arms, and legs are somewhat pointed in the Registered Trademark at Issue, whereas in the Challenged Mark the ears, nose, arms, and legs are expressed as rounded; ❷ the bear of the Registered Trademark at Issue has a broadly smiling face, whereas the bear of the Challenged Mark is expressionless; ❸ the Registered Trademark at Issue depicts the bear standing upright like a person,[9] whereas in the Challenged Mark the bear's hind legs protrude further forward so that it appears to be in a seated posture; ❹ the Registered Trademark at Issue appears to have an additional thick outline surrounding the outside of the bear shape (), whereas in the Challenged Mark the outline of the bear is comparatively distinct in itself (); and ❺ the bear of the Registered Trademark at Issue has a pattern on its belly resembling

9) The Defendant also described it at the application stage as "a shape in which a bear stands upright, supported on its hind legs like a person" (see Plaintiff's Exhibit No. 5 and Defendant's Exhibit No. 22).

marks impressed by a mold (), which the Challenged Mark does not have.[10)]

c) Comparison of the Pronunciation and Concept of the Marks

Both the Registered Trademark at Issue and the Challenged Mark are jellies depicting a bear, and are called and perceived as "bear-shaped jelly," "bear jelly," "teddy bear jelly," "jelly bear," "gummy bear," simply "bear," "teddy bear," and the like.

However, if two three-dimensional trademarks that are called and perceived by terms generically designating numerous similar or dissimilar shapes were held to be similar trademarks as a whole solely because their pronunciation and concept are similar, irrespective of whether their appearance is similar, the scope of similarity of trademarks would be excessively expanded, bringing about the unreasonable result of unduly restricting freedom in the selection of trademarks (see Supreme Court Decision 2011Da18802, decided January 24, 2013).

As discussed above, various bear-shaped jellies are distributed and sold in the domestic market, and all of them will be called and perceived by generic terms such as "bear-shaped jelly"; accordingly, even though both the Registered Trademark at Issue and the Challenged Mark may be called and perceived as "bear-shaped jelly" and the like, the two marks cannot be concluded to be similar to each other solely because such generic pronunciation and concept are similar.

[Even assuming that the Registered Trademark at Issue is called and perceived as "HARIBO," the statements or images in Defendant's Exhibits Nos. 25 and 26 (instances of calling pendants, rings, necklaces, earrings, mobile phone cases, and the like "HARIBO pendants" and so forth) and the instances discussed below are insufficient to establish—beyond showing that there are examples of calling a bear-shaped motif

10) See also the Defendant's Trademark No. 6,331,501, registered in the United States on April 27, 2021 (Defendant's Exhibit No. 41).

by that name in the sense of “HARIBO style”—that the Challenged Mark is called and perceived as “HARIBO,” and there is no other evidence to support such a finding.]

d) Summary

The Registered Trademark at Issue and the Challenged Mark differ in appearance, so that confusion or mistake as to the source of the goods can be avoided; they are therefore not similar as a whole.

C. Determination on the Defendant’s Remaining Arguments

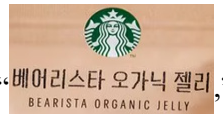
The Defendant asserts that consumers, upon seeing the Challenged Mark, are confused or mistaken into taking it for a “HARIBO” product, that is, for the Registered Trademark at Issue.

Examining this, according to the statements or images in Defendant’s Exhibits Nos. 24, 47, 48, and 49, it is indeed confirmed that consumers who had purchased the “(Starbucks) Bearista Organic Jelly” product, which contains jellies having the shape of the Challenged Mark, wrote the following posts on the internet (all of the postings below were written on internet blogs and the like by consumers who purchased the above product; where the date of writing is confirmed, it is noted beneath the exhibit number).

Packaging method of the (Starbucks) Bearista Organic Jelly (Defendant’s Exhibit No. 48)


Exhibit number	Content		
Defendant's Exhibit 24-1 (20/12/03)	Did you know Starbucks has jellies too? I went to Starbucks and they had jellies! I'm a well-known jelly maniac so I couldn't help myself~ They said they were bear-shaped jellies, so even before opening the pack I thought of HARIBO jellies After opening them, they looked exactly like HARIBO bear jellies, so I thought the texture would be like HARIBO jellies and took a bite!!! HARIBO jellies have a springy, bouncy texture, whereas the Starbucks jellies cut right through smoothly And compared with HARIBO, the fruit flavor is much stronger~!		
Defendant's Exhibit 24-2 (21/05/03)	 **Siheung Yerin's mom** Oh, Starbucks launched jellies too, apparently. lol I've never seen them before, they look similar to HARIBO  **G_y_e_o_n_g_g_i** (Author) They have jellies too! They're similar to HARIBO lol but these are softer lol 2021.05.30. 23:21 2021.05.30. 23:20		
Defendant's Exhibit 24-3	Actually, it looks exactly like HARIBO, so I thought the texture would be similar to HARIBO jellies, but nope!! If HARIBO jellies feel somewhat firm, I guess you could say this one just squishes...?!	Defendant's Exhibit 24-4	The texture is completely different from HARIBO jellies HARIBO is chewy and sticky, whereas this one just snaps..
Defendant's Exhibit 24-5	Bearista Organic Jelly (feat. Starbucks) These jellies are seriously super delicious The shape looks like HARIBO, but the texture, aroma, and taste are all different—and all to my liking		
Defendant's Exhibit 24-6	The shape just feels like HARIBO I took a bite expecting something a bit like HARIBO, but	Defendant's Exhibit 24-7	I tried them, and they are completely different from the chewiness of HARIBO.
Defendant's Exhibit 24-8	Starbucks jellies I got from my therapist They look like HARIBO but are much softer and tastier. #StarbucksBearistaOrganicJelly	Defendant's Exhibit 24-10	They look exactly like HARIBO but they're different! How should I put it The texture of yanggaeng, maybe?
Defendant's Exhibit 24-9 (22/07)	The Starbucks Bearista Organic Jelly I received as a gift The shape is a bear like HARIBO, but HARIBO is so hard that it's uncomfortable to eat, whereas the Bearista Organic Jelly is soft, which was nice.		
Defendant's Exhibit 24-11	The Bearista Organic Jelly sold at Starbucks is refreshing and delicious! It looks like HARIBO but it is a bit larger and lacks that characteristic junky taste. Recommended as a snack for expectant mothers!		
Defendant's Exhibit 24-12	Starbucks Bearista Organic Jelly They look similar to HARIBO bear jellies but the texture is completely different.	Defendant's Exhibit 24-14 (22/09/16)	They looked similar to HARIBO so I thought, eh, whatever, then was totally surprised by the completely different texture!

Exhibit number	Content
	Soft!! And much more fruity in flavor
Defendant's Exhibit 24-13	The Bearista Organic Jelly has a crappy texture. I was fooled by the HARIBO jelly shape.... The texture totally feels like yanggaeng Ate one and sealed it away....
Defendant's Exhibit 24-15	They gave them to me saying there were things called Bearista jellies inside, and they look very similar to HARIBO, the teddy bear jelly. The wrapper does say Starbucks, but looking only at the teddy bear drawn on the wrapper, it seemed no different from HARIBO. Still, as shown on the wrapper, they would make quite a nice picture if used to decorate a drink glass or placed beside one. And the shape is small in size, which makes them look even cuter.
Defendant's Exhibit 47	Bearista Organic Jelly, KRW 2,900 Among the snacks, the cheapest were these and the rice crackers, right? I picked them thinking of HARIBO, but the texture is completely different. HARIBO is chewy overall, whereas the Starbucks jellies are not strongly chewy. Jaw joints okay^^ They chew cleanly, haha. Sorry, teddy bear; And they are much more fruity than HARIBO, and sweet lol There are six flavors: orange, lemon, pineapple, apple, blackcurrant, and raspberry.
Defendant's Exhibit 48 (21/01/01)	★★★★★ pji******* I was expecting HAR*BO.. but the texture is completely different
Defendant's Exhibit 49 (21/01/26)	The look of these jellies is the oh-so-familiar teddy bear shape! No wonder they're called HARIBO's twin. This bear is Starbucks' Bearista. They are jellies in four colors with six fruit flavors. A premium version of HARIBO? #StarbucksOrganicJelly A sweet treat from Starbucks! Not a drink, not a dessert—the jellies are the star. It's the jelly version of Bearista, the face of Starbucks. Is it just me, or do they slightly bring HARIBO to mind? lol

However, looking at the above instances, the consumers merely associated the Challenged Mark with "HARIBO" simply because they saw that the Challenged Mark was a bear-shaped jelly, and rather clearly distinguished the product they had purchased and consumed from "HARIBO" products while comparing the two; it is therefore difficult to regard these as instances in which consumers were confused or mistaken between the Challenged Mark and the Registered Trademark at Issue. Moreover, as discussed above, the product concerned is sold in a wrapper bearing the mark "

," so the likelihood of

the Challenged Mark being confused or mistaken with the Registered Trademark at Issue appears low.

The Defendant's assertion in this part is not accepted.

D. Sub-conclusion

The Challenged Mark was not used as a trademark for the indication of the source of jellies, nor is it similar to the Registered Trademark at Issue; it therefore does not fall within the scope of rights of the Registered Trademark at Issue.

The IPTAB Decision at Issue, which determined otherwise, is unlawful and must be revoked.

4. Conclusion

The Plaintiff's claim seeking revocation of the IPTAB Decision at Issue is well-founded, and the court accordingly renders its decision as set forth in the Order.

Presiding Judge Hyejin LEE
Judge Young Gi KIM
Judge Bowon KWON

IP HIGH COURT OF KOREA
FIFTH DIVISION
DECISION

Case No.	2024Heo12685 Scope of Rights Confirmation (Patent)
Plaintiff	A Counsel for Plaintiff DR & AJU LLC Attorneys in Charge Jongsun CHOI, Shinjung LEE
Defendant	B Counsel for Defendant Patent Attorney Munho KANG
Date of Closing Argument	March 11, 2025
Decision Date	April 10, 2025

ORDER

1. The IPTAB Decision 2023Dang3968, decided May 14, 2024, shall be revoked.

2. Litigation costs shall be borne by the Defendant.

DEMAND FOR RELIEF

As ordered.

OPINION

1. Basic Facts

A. The Plaintiff's Patented Invention at Issue[1)]

1) Title of Invention: Detachable automatic rotating door for a showcase

2) Filing Date of Application / Registration Date / Registration Number: May 3, 2013 / August 19, 2013 / No. 1299479

3) Claims

[Claim 4] A detachable automatic rotating door for a showcase, characterized in that: a plurality of rotating panels (30) are provided (hereinafter "Element 1-1"); a finishing cap (40) is fitted to the upper part of each rotating panel (30), a fitting protrusion (41) being mounted on one side of the finishing cap (40) (hereinafter "Element 1-2"); a drive gear (50) is mounted on the fitting protrusion (41) (hereinafter "Element 2-1"); a finishing cap (40) is fitted to the lower part of each rotating panel (30), and the rotating panels (30) are assembled, by means of the fitting protrusions (41) of the finishing caps (40) fitted to their upper parts, into a plurality of fitting holes (23) formed in a row in an upper frame (20) (hereinafter "Element 1-3"); the drive gears (50) mounted on the fitting protrusions (41) are positioned in a row on the upper surface of the upper frame (20) (hereinafter "Element 2-2"); a first driven gear (51) is installed directly below each drive gear (50) (hereinafter "Element 3"); a second driven gear (52) is meshed to the side of the first driven gear (51) (hereinafter "Element 4"); a rack gear (61) is inserted into a rail groove (21) on the inner surface of the upper frame (20) and meshes

1) The claims and the contents of the Patented Invention at Issue, the Challenged Invention, and the Prior Art are, as a rule, set out as written in the specifications and other documents, without regard to spelling or spacing.

with the drive gears (50) (hereinafter “Element 5”); a drive motor (63) that drives the rack gear (61) is installed on the upper surface of the upper frame (20) (hereinafter “Element 6”); and a cover (26) equipped with a sensor (80) is mounted above the upper frame (20) (hereinafter “Element 7”), such that, as the rack gear (61) simultaneously rotates the drive gears (50) mounted on the upper parts of the rotating panels (30) through operation of the drive motor (63) in response to a detection signal of the sensor (80), the first and second driven gears (51, 52) rotate in mutually opposite directions so that the rotating panels (30) open and close in mutually opposite directions (hereinafter “Element 8”) (hereinafter “Claim 4 at Issue”; Claim 5 is referred to in the same manner, and together they are referred to as the “Patented Invention at Issue”).

[Claim 5] The detachable automatic rotating door for a showcase according to any one of Claims 1 to 4, characterized in that a fitting protrusion (41) is mounted on the finishing cap (40) fitted to the lower part of the rotating panel (30), and the fitting protrusions (41) of the finishing caps (40) fitted to the lower parts of the rotating panels (30) are assembled into a plurality of fitting holes (23) formed in a lower frame (22).

4) Principal Contents and Drawings: As set forth in [Appendix 1] (contents omitted).

B. Challenged Invention

The Challenged Invention relates to an “automatic rotating door for a showcase,” and the specification and drawings of the Challenged Invention as amended by the Plaintiff on April 11, 2024 are as set forth in [Appendix 2] (contents omitted).

C. Prior Art

This relates to a "detachable automatic rotating door for a showcase" published in Registered Patent Gazette No. 1196261, published on November 5, 2012; its principal contents and drawings are as set forth in [Appendix 3] (contents omitted).

D. Procedural History of the IPTAB Decision at Issue

1) On December 18, 2023, the Plaintiff filed a petition against the Defendant seeking an affirmative trial to confirm the scope of rights (hereinafter "Petition for Trial at Issue"), asserting that the Challenged Invention falls within the scope of rights of the Patented Invention at Issue, and on April 11, 2024 amended the specification and drawings of the Challenged Invention as set forth in [Appendix 2] above (contents omitted).

2) The Intellectual Property Trial and Appeal Board (hereinafter "IPTAB") examined the matter as Case No. 2023Dang3968 and, on May 14, 2024, rendered an administrative decision dismissing the Petition for Trial at Issue (hereinafter "IPTAB Decision at Issue") on the ground that "Claim 4 at Issue and the Challenged Invention differ in the detailed configuration of the drive unit for opening and closing the rotating panels, and accordingly also differ in their operational effects in terms of ease of installing additional devices, convenience of maintenance, and cost; and considering such differences in configuration and operational effect, these differences in configuration cannot be said to be equivalent, so that the Challenged Invention does not fall within the scope of rights of Claim 4 at Issue. Since Claim 5 at Issue is a dependent claim of Claim 4 at Issue, so long as the Challenged Invention does not fall within the scope of rights of Claim 4 at Issue, it does not fall within the scope of rights of Claim 5 at Issue either."

[Factual basis] Undisputed facts; the statements or images in Plaintiff's Exhibits Nos. 1 through 3 and Defendant's Exhibit No.

1; the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

1) The Challenged Invention has a configuration equivalent to that stated in Claim 4 at Issue and therefore falls within its scope of rights.

2) The Challenged Invention includes all of the additional limitations of Claim 5 at Issue, which depends on Claim 4 at Issue, and therefore falls within its scope of rights as well.

B. The Defendant

1) The Challenged Invention does not include Elements 3 and 4 of Claim 4 at Issue, and differs from Claim 4 at Issue in the detailed configuration of the drive unit for opening and closing the rotating panels — such as the coupling relationship between the rack gear and the drive gear, the coupling relationship between the rack gear and the driven gear, the number of drive gears and driven gears, and the number and arrangement of rack gears — and accordingly also differs in its operational effects in terms of ease of installing additional devices, convenience of maintenance, and cost. Moreover, the Challenged Invention merely increases the number of rack gears and driven gears (pinion gears) disclosed in the Prior Art from one each to two each, and thus constitutes technology already publicly known at the time of filing of the Patented Invention at Issue and is free-to-practice technology. Accordingly, the elements of the Challenged Invention and of Claim 4 at Issue cannot be regarded as equivalent.

2) Since the Challenged Invention does not fall within the scope of rights of Claim 4 at Issue, it does not fall within the scope of rights of Claim 5 at Issue, its dependent claim, either.

3. Whether the Challenged Invention Falls Within the Scope of Rights of the Patented Invention at Issue

A. Determination on Claim 4 at Issue

1) Comparison of the Elements of Claim 4 at Issue and the Challenged Invention

A) Comparison of Elements

Element	Claim 4 at Issue	Challenged Invention
1-1	A plurality of rotating panels (30) are provided.	A plurality of rotating panels (30') are provided.
1-2	A finishing cap (40) is fitted to the upper part of the rotating panel (30), a fitting protrusion (41) being mounted on one side of the finishing cap (40).	A finishing cap (40') is fitted to the upper part of the rotating panel (30'), a fitting protrusion (41') being mounted on one side of the finishing cap (40').
1-3	A finishing cap (40) is fitted to the lower part of the rotating panel (30), and the rotating panels (30) are assembled, by means of the fitting protrusions (41) of the finishing caps (40) fitted to their upper parts, into a plurality of fitting holes (23) formed in a row in the upper frame (20).	A finishing cap (40') is fitted to the lower part of the rotating panel (30'), and a plurality of rotating panels (30') are arranged in a row as the fitting protrusions (41') are fitted into fitting holes (22') formed in the upper frame (20').
2-1	A drive gear (50) is mounted on the fitting protrusion (41).	The first and second driven gears (42', 43') are mounted on the upper or lower part of the fitting protrusion (41'), respectively.
2-2	The drive gears (50) mounted on the fitting protrusions (41) are positioned in a row on the upper surface of the upper frame (20).	The first and second driven gears (42', 43') mounted on the upper and lower parts of the fitting protrusion (41') are positioned on the upper surface of the upper frame (20').

Element	Claim 4 at Issue	Challenged Invention
3	A first driven gear (51) is installed directly below the drive gear (50).	A second rack gear (53') that is inserted into a second rail groove (26') on the side of a second rail frame (24') installed on the other side of the upper frame (20') and meshes with the second driven gear (43').
4	A second driven gear (52) is meshed to the side of the first driven gear (51).	
5	A rack gear (61) is inserted into a rail groove (21) on the inner surface of the upper frame (20) and meshes with the drive gears (50).	A first rack gear (52') that is inserted into a first rail groove (25') on the side of a first rail frame (23') installed on one side of the upper frame (20') and meshes with the first driven gear (42').
6	A drive motor (63) that drives the rack gear (61) is installed on the upper surface of the upper frame (20).	A drive cylinder (50') that drives the first and second rack gears is installed on the upper surface of the upper frame (20').
7	A cover (26) equipped with a sensor (80) is mounted above the upper frame.	A cover (11') that protects the upper frame (20') The sensor (12') is mounted below the lower frame (21').
8	In response to a detection signal of the sensor (80), the drive motor (63) operates so that the rack gear (61) simultaneously rotates the drive gears (50) mounted on the upper parts of the rotating panels (30), whereby the first and second driven gears (51, 52) rotate in mutually opposite directions so that the rotating panels (30) open and close in mutually opposite directions.	In response to a detection signal of the sensor (12'), the drive cylinder (50') operates so that the first rack gear (52') rotates the first driven gear (42') clockwise and the second rack gear (53') rotates the second driven gear (43') counterclockwise, whereby the rotating panels (30') open and close in mutually opposite directions.

B) Examination of Commonalities and Differences

(1) Element 1[2)]

Element 1 of Claim 4 at Issue and the corresponding element of the Challenged Invention are identical in that "a plurality of rotating panels (30) [rotating panels (30')][3)] are provided; a finishing cap (40) [finishing cap (40')] is fitted to the upper part of the rotating panel (30), a fitting protrusion (41) [fitting protrusion (41')] being mounted on one side of the finishing cap (40); and a finishing cap (40) is fitted to the lower part of the rotating panel (30), the rotating panels (30) being assembled, by means of the fitting protrusions (41) of the finishing caps (40) fitted to their upper parts, into a plurality of fitting holes (23) [fitting holes (22')] formed in a row in the upper frame (20) [upper frame (20')]."

(2) Elements 2 Through 5

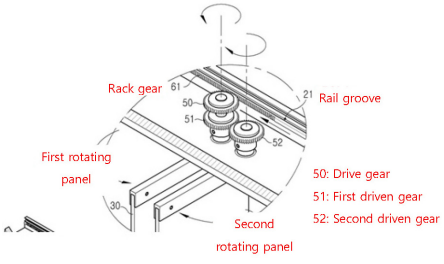
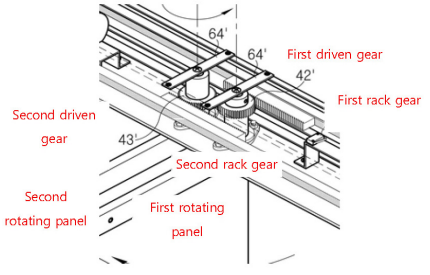
Elements 2 through 5 of Claim 4 at Issue and the corresponding elements of the Challenged Invention are technical means that receive power from the drive motor (63) [drive cylinder (50')] — the power source examined under Element 6 below — and rotate the rotating panels. The two configurations are identical in that they transmit the power of the drive motor or drive cylinder, the power source, to a rack gear and convert the linear motion of the rack gear into rotational motion of the drive gear (50) and the first and second driven gears (51, 52) [first and second driven gears (42', 43')] so as to rotate the rotating doors.

However, in rotating adjacent rotating panels in mutually opposite directions, there is a difference in that ① Elements 2 through 5 of Claim 4 at Issue install a first driven gear below the drive gear and

2) Where a branch number is not specified for an element that has branch numbers, the reference includes those branch numbers. The same applies hereinafter.

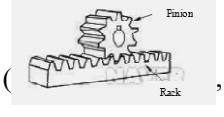
3) What is stated within [ ] is the element of the Challenged Invention corresponding to the element of Claim 4 at Issue. The same applies hereinafter.

rotate the adjacent rotating panel in the opposite direction through a second driven gear meshed therewith, whereas ② the Challenged Invention installs a second driven gear on the fitting protrusion of the rotating panel and rotates the second driven gear by a rack gear in the same manner as the first driven gear is rotated, but in the opposite direction. That is, as shown in the drawings below, Claim 4 at Issue and the Challenged Invention are identical in that the rotation of the first rotating panel is actuated by a rack gear and a driven gear (pinion[4]), but they differ in that, in rotating the second rotating panel adjacent to the first rotating panel, Claim 4 at Issue uses a driven gear to connect the rotating shaft of the first rotating panel to the rotating shaft of the second rotating panel, whereas the Challenged Invention independently uses, from the opposite direction, the same rack and pinion structure used to rotate the first rotating panel (hereinafter "Difference 1").

Claim 4 at Issue	Challenged Invention
	

(3) Element 6

Element 6 of Claim 4 at Issue and the corresponding element of the Challenged Invention are substantially identical in that they transmit power to the rack gear by means of the drive motor (63) [drive cylinder

4) A pinion is a gearwheel that forms part of a rack-and-pinion structure (

, the rack shown in the figure is also called a rack gear).

(50')], the power source that rotates the rotating panels.

(4) Element 7

Element 7 of Claim 4 at Issue and the corresponding element of the Challenged Invention are identical in that they are provided with a sensor (80) [sensor (12')] that detects the user. However, there is a difference in the installation position of the sensor, in that the sensor of Element 7 of Claim 4 at Issue is installed on the upper part of the upper frame, whereas the corresponding element of the Challenged Invention is installed on the lower part of the lower frame (hereinafter "Difference 2"; together with Difference 1, the "Differences").

(5) Element 8

Element 8 and the corresponding element of the Challenged Invention are identical in that, in response to a detection signal of the sensor (80) [sensor (12')], the drive motor (63) [drive cylinder (50')] operates so that adjacent rotating panels rotate in mutually opposite directions and thereby open and close. However, in accordance with the difference in configuration constituting Difference 1, there is a difference in the configuration by which power is transmitted from the power source to the rotating panels (since this difference is incidental to Difference 1, it is not separately distinguished and is examined together with Difference 1).

C) Results of the Examination

Taking together the results of the foregoing examination, Elements 1 and 6 of Claim 4 at Issue may be regarded as identical to the respective corresponding elements of the Challenged Invention, whereas Elements 2 through 5, 7, and 8 of Claim 4 at Issue differ from the corresponding elements of the Challenged Invention in the respects discussed above. Below, in accordance with the Plaintiff's assertion, this court examines whether, notwithstanding the above Differences, the elements of Claim 4 at Issue and the respective corresponding

elements of the Challenged Invention are equivalent.

2) Whether the Elements of Claim 4 at Issue and the Challenged Invention Are Equivalent

A) Relevant Legal Principles

For a challenged invention to fall within the scope of rights of a patented invention, each element stated in the claims of the patented invention and the organic combination of the elements must be included in the challenged invention. Meanwhile, even where any of the elements stated in the claims of the patented invention have been substituted or altered in the challenged invention, if the problem-solving principle is the same in the two inventions, the same purpose can be achieved and substantially the same operational effect can be obtained despite such substitution, and such substitution is so obvious that anyone having ordinary skill in the art to which the invention pertains (hereinafter "a person of ordinary skill in the art") could readily conceive of it, then, absent special circumstances—such as where the challenged invention constitutes technology identical to technology already publicly known at the time of filing of the patented invention or technology that a person of ordinary skill in the art could readily have invented from publicly known technology, or where the substituted configuration of the challenged invention was deliberately excluded from the claims through the prosecution of the patented invention—the challenged invention must be regarded as being, as a whole, equivalent to the configuration stated in the claims of the patented invention and thus still falling within the scope of rights of the patented invention (see Supreme Court Decision 2010Hu67, decided July 28, 2011, etc.).

In determining whether the problem-solving principle of a challenged invention and of a patented invention is the same, part of the configuration stated in the claims must not be formally extracted; rather, it must be determined by substantively exploring the core of

the inventive concept underlying the means of solution peculiar to the patented invention, as compared with the prior art, taking into account the detailed description of the invention stated in the specification and the technology publicly known at the time of filing (see Supreme Court Decision 2012Hu1132, decided July 24, 2014, etc.).

Furthermore, whether operational effects are substantially the same must be determined chiefly by reference to whether the allegedly infringing product and the like also solve the technical problem that the patented invention solved but that had not been solved in the prior art. Accordingly, if the core of the inventive concept underlying the means of solution peculiar to the patented invention, as grasped by taking into account the detailed description of the invention stated in the specification and the technology publicly known at the time of filing, is also implemented in the allegedly infringing product and the like, the operational effects are in principle to be regarded as substantially the same. However, where such core of the inventive concept was already publicly known at the time of filing of the patented invention or amounts to nothing different therefrom, whether the operational effects are substantially the same cannot be determined by reference to whether the core of the inventive concept of the patented invention is implemented in the allegedly infringing product and the like; rather, it must be determined by comparing the individual functions and roles of the elements at issue for equivalence (see Supreme Court Decision 2015Hu2327, decided February 14, 2019, etc.).

B) Whether the Problem-Solving Principle Is the Same

(1) The Problem-Solving Principle of Claim 4 at Issue

Taking into account the following statements in the specification, which are established from the facts found above and the evidence cited above together with the overall purport of the pleadings and oral arguments, and the technology publicly known at the time of filing of the Patented Invention at Issue, it is reasonable to find that the core of the inventive concept underlying the means of solution peculiar to

Claim 4 at Issue lies in “rotating adjacent rotating panels in mutually opposite directions so that they open and close at the front.”

(a) First, the specification of the Patented Invention at Issue contains the following statements.

□ Problem to Be Solved

[0006] Accordingly, the present invention was conceived in view of the above problems and seeks to provide a detachable automatic rotating door for a showcase that not only protects fresh instant foods and various beverages displayed inside the showcase from dust flowing in from outside so that they can be displayed in a fresher state, but also prevents cold air that enhances freshness from escaping excessively to the outside of the showcase.

□ Effects of the Invention

[0008] When the detachable automatic rotating door for a showcase according to the present invention is used, various foods and beverages displayed in an open-type showcase can be protected from foreign matter flowing in from outside so that a cleaner display state can be maintained, and the problem of cold air that enhances freshness escaping excessively to the outside is solved, so that power consumption can be reduced. In addition, the surface of the rotating panels made of a transparent material (acrylic plate or film sheet) can be readily used to promote the various foods displayed inside the showcase.

[0009] Furthermore, since the upper end of each individually configured rotating panel can be readily attached to and detached from the finishing cap through a configuration such as a fitting hole, a connecting ring, or a mounting protrusion, a user can easily replace a rotating panel immediately upon damage. Meanwhile, considering that the present invention can be detachably mounted on an existing showcase, improved service can be provided to consumers using existing facilities.

□ Detailed Description for Carrying Out the Invention

[0026] The technology described with reference to FIGS. 6 and 7 allows the rotating panels (30) to open even when they are rotated in different

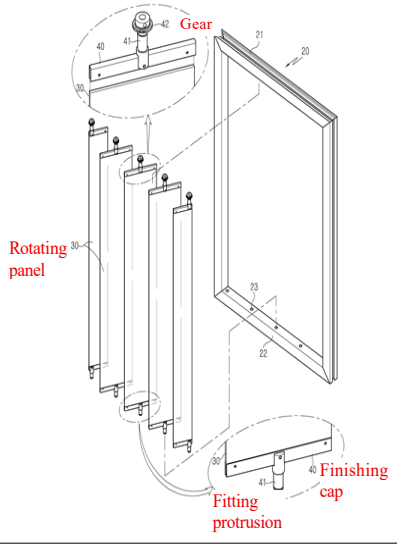
directions, while maintaining the same spacing (L), as in FIG. 6(c). In addition, since the opened rotating panels (30) are not positioned toward the inside of the showcase as in FIG. 6(c) but are positioned on the outside of the showcase as they open, no problem of interference arises between the display shelf (11) installed inside the showcase and the rotating panels (30); and since the spacing (L) of the opening rotating panels can be secured more widely upon installation, it makes it easier to place and take out bulky foods.

[0032] Meanwhile, another embodiment of the present invention described through FIGS. 8 to 11 is one in which the opening position of the rotating panels (30) is made to be located only at the front of the showcase, through the operation of the rack gear (61), the drive gear (50), and the first and second driven gears (51, 52). This is intended to prevent interference with the display shelf (11) installed inside the showcase in the course of rotation of the rotating panels (30), and since the spacing (L) of the opening rotating panels (30) can be secured more widely upon installation, it makes it easier to place and take out bulky foods.

(b) The technology publicly known at the time of filing of the Patented Invention at Issue is as follows.

① The Prior Art, which is technology publicly known at the time of filing of the Patented Invention at Issue, relates to a "detachable automatic rotating door for a showcase." Its registered patent gazette discloses "a detachable rotating door installed at the front of an open-type showcase, in which a plurality of rotating panels, each having finishing caps with fitting protrusions formed at the centers of their upper and lower parts, are configured such that a rack gear inserted into a rail groove formed on the side of an upper frame meshes with gears installed at the leading ends of the plurality of rotating panels, so that the linear motion of the rack gear is converted into rotational motion of the gears and the plurality of rotating panels rotate simultaneously."

Drawing 2



② The registered patent gazette of this Prior Art discloses the technical concept of installing, at the front of a showcase, rotating panels that rotate simultaneously through gears and that have fitting configurations formed at their upper and lower parts so as to be readily attachable to and detachable from a frame, in order to protect foods and the like displayed in an open-type showcase from foreign matter and to prevent cold air from escaping excessively to the outside. However, it does not disclose the technical concept of mounting the fitting protrusion on one side, rather than at the center, of the upper and lower parts of the rotating panels, and having adjacent rotating panels rotate in mutually opposite directions so as to open and close at the front, thereby preventing interference with the internal display shelf and securing a wide opening width so as to make it convenient to put in and take out bulky foods.

③ There is no other evidence showing that the above technical concept, which is not stated in the registered patent gazette of the Prior Art, was already publicly known at the time of filing of the Patented Invention at Issue.

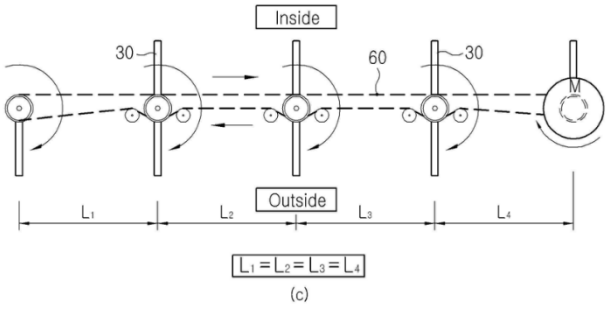
(c) The Defendant asserts in substance that the core of the inventive concept of Claim 4 at Issue is merely the installation of detachable rotating panels on a showcase; that this is content publicly known through the Prior Art; and that the opening position and direction of the rotating panels merely contribute to implementing that core of the inventive concept, so that the core of the inventive concept of Claim 4 at Issue cannot be grasped therefrom. That assertion cannot be accepted, for the following reasons.

① The core of the inventive concept of a patented invention is not to be grasped by confining it to the portions of the description of the invention in the specification stating the "problem to be solved" or the "effects of the invention"; it must be determined by taking into account the specification as a whole together with the technology publicly known at the time of filing.

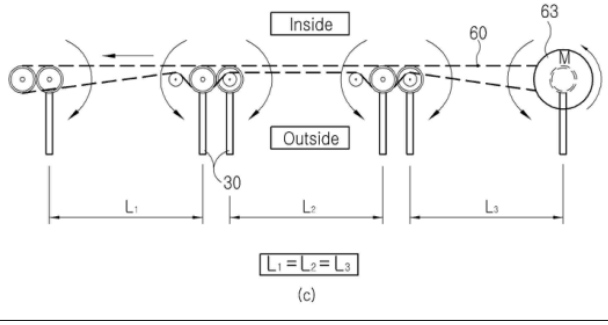
② Claim 4 at Issue includes the configuration in which a fitting protrusion is mounted on one side of the finishing cap fitted to the upper part of the rotating panel (Element 1-2) and the configurations by which the rotating panels can be rotated in mutually opposite directions so as to open and close (Elements 2 through 5 and 8). Furthermore, as discussed above, the description of the invention in the specification of the Patented Invention at Issue states that, even when the rotating panels are rotated in different directions, they can be opened while maintaining the same spacing; that, as the rotating panels open toward the outside of the showcase, the problem of interference by the display shelf does not arise; and that the spacing between the rotating panels can be secured widely (paragraphs [0026] and [0032]). The core of the inventive concept of Claim 4 at Issue, as may be grasped from such statements in the specification and the like, is that "adjacent rotating panels can be rotated in mutually opposite directions so as to open and close at the front," and it is difficult to regard this as merely an ancillary means for implementing the already publicly known technical concept of installing detachable rotating panels on a showcase.

③ The specification of the Patented Invention at Issue discloses, as set forth below, drawings in which the width (L1 through L3) in the case where adjacent rotating panels having fitting protrusions mounted on one side rotate in mutually opposite directions is shown as wider than the width (L1 through L4) in the case where all rotating panels having fitting protrusions mounted at the center rotate in one direction.[5)]

Excerpt from Drawing 5



Excerpt from Drawing 6



(2) Whether the Problem-Solving Principle of Claim 4 at Issue Is Implemented in the Challenged Invention

In light of the following description of the Challenged Invention, the Challenged Invention appears to fully implement the core of the

5) FIGS. 5 and 6 are drawings of a configuration operated by a flat gear belt, but in light of their configuration and operating principle, they may also be considered in ascertaining the core of the inventive concept of Claim 4 at Issue, which operates with a rack gear.

inventive concept of Claim 4 at Issue, namely "rotating adjacent rotating panels in mutually opposite directions so that they open and close toward the front."

> <25> As examined above, in accordance with the linear motion of the drive cylinder (50') that simultaneously pulls the first rack gear (52') and the second rack gear (53'), the first rack gear (52') and the second rack gear (53'), which are the drive means, move linearly, whereby the first driven gear (42') is rotated clockwise so that, as shown in FIG. 10, the first and third rotating panels (30') open clockwise,
> <26> and the second driven gear (43') is rotated counterclockwise so that the second and fourth rotating panels (30') open counterclockwise; consequently, the plurality of rotating panels (30') rotate simultaneously in mutually opposite directions toward the outside of the showcase in a "double-door manner," so that they open with the entrance secured widely, allowing the user to take out foods conveniently.

(3) Sub-conclusion

Accordingly, Claim 4 at Issue and the Challenged Invention are determined to have the same problem-solving principle.

C) Whether the Operational Effects Are the Same

It is reasonable to find that Claim 4 at Issue and the Challenged Invention have the same operational effect, in that both, by having "adjacent rotating panels rotate in mutually opposite directions so as to open and close toward the front," prevent interference with the display shelf installed inside the showcase in the course of rotation of the rotating panels and secure a wide opening width.

D) Whether the Alterations Are Easily Achievable

Taking together the following circumstances, it is reasonable to find that the alterations corresponding to the Differences are easily achievable.

(1) Determination on Difference 1

(a) Difference 1 concerns the technical means for rotating adjacent rotating panels in opposite directions: Elements 2 through 5 of Claim 4 at Issue install a first driven gear below the drive gear and rotate the adjacent rotating panel in the opposite direction through a

second driven gear meshed therewith, whereas the Challenged Invention installs a second driven gear on the fitting protrusion of the rotating panel and rotates the second driven gear by a rack gear in the same manner as the first driven gear is rotated, but in the opposite direction.

(b) Accordingly, the Challenged Invention as described above appears capable of being arrived at by removing, from the configuration of Claim 4 at Issue in which a first driven gear is installed below the drive gear and the adjacent rotating panel is rotated through a second driven gear meshed therewith, the meshing between the first driven gear and the second driven gear, and altering it into a configuration in which a second driven gear is installed on the fitting protrusion of the adjacent rotating panel and the second driven gear is rotated by a separate rack gear traveling in the opposite direction.

(c) Now, the rack-and-pinion structure is not only a power conversion mechanism widely used in the field of machinery manufacture for converting linear motion into rotational motion or vice versa, but a rack-and-pinion structure is also disclosed as a device for rotating panels in both the Prior Art and the Patented Invention at Issue. Furthermore, even in light of the structure of Claim 4 at Issue, the above alteration of configuration does not appear to affect other elements or to require extensive structural alteration, nor does it appear to impair the effects or object of Claim 4 at Issue. Accordingly, in light of the level of technology at the time of filing of the Patented Invention at Issue, a person of ordinary skill in the art in the field of showcase manufacture could readily alter the configuration of Claim 4 at Issue, in which adjacent rotating panels are rotated by mutually meshed driven gears, into a configuration in which each adjacent rotating panel is rotated by an independent rack and gear (driven gear), based on common knowledge and the rack-and-pinion structure, which is well-known and commonly used art.

(2) Determination on Difference 2

(a) Difference 2 concerns the installation position of the

sensor: the sensor of Claim 4 at Issue is installed on the upper part of the upper frame, whereas the sensor of the Challenged Invention is installed on the lower part of the lower frame.

(b) The specification of the Patented Invention at Issue states that "the sensor (80) is a conventional one, and it is preferable to install it at any position within the configuration of the present invention where it can properly detect the movement of a consumer" (paragraph [0018]), and there is no basis for finding that any particular difference in technical effect arises depending on whether the sensor for detecting the movement of a showcase user is installed on the upper frame or the lower frame of the showcase.

(c) That being so, the installation position of the sensor amounts to no more than a matter that a person of ordinary skill in the art could select as needed, and it is reasonable to find that a person of ordinary skill in the art could readily alter the installation position of the sensor of Claim 4 at Issue into the installation position of the sensor of the Challenged Invention.

E) Whether the Challenged Invention Is Free-to-Practice Technology

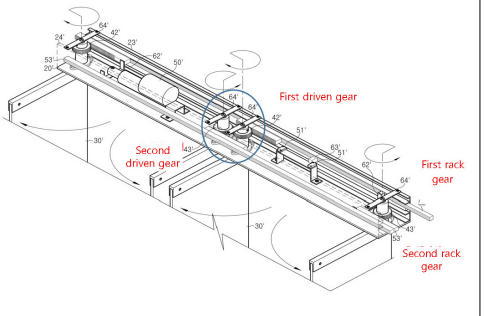
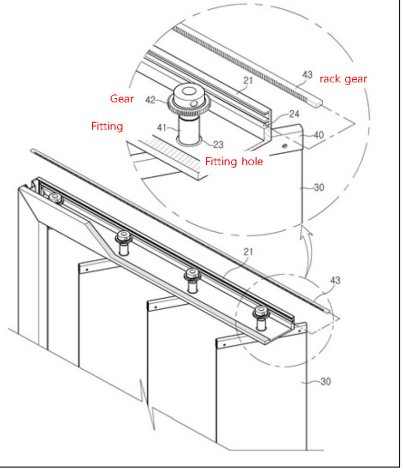
(1) The Defendant asserts in substance that the Challenged Invention merely increases the number of rack gears and pinions disclosed in the Prior Art from one each to two each, and thus constitutes technology already publicly known at the time of filing of the Patented Invention at Issue and is free-to-practice technology.

(2) First, as to whether the Challenged Invention constitutes publicly known technology: in light of the contents of the Challenged Invention and the Prior Art discussed above, the two differ in the direction of rotation of the rotating panels, the position of rotation, the power transmission means, and the like, and thus cannot be regarded as identical to each other; and even taking together the circumstances asserted by the Defendant and the evidence it submitted, it is difficult to find that the Challenged Invention constitutes publicly known

technology itself.

(3) Next, as to whether a person of ordinary skill in the art could readily arrive at the Challenged Invention based on the Prior Art, which is publicly known technology: in light of the following circumstances, apparent from the facts found above and the evidence cited above together with the overall purport of the pleadings and oral arguments, the circumstances asserted by the Defendant and the evidence it submitted are insufficient to find that the Challenged Invention constitutes free-to-practice technology, and there is no other evidence to support such a finding.

(a) The Challenged Invention opens and closes by having adjacent rotating panels rotate in opposite directions at the front of the showcase exterior through independent rack gears and driven gears, whereas the Prior Art differs in that all rotating panels are connected by a single rack gear and multiple gears and open and close by rotating in one direction at the inside and outside of the showcase.

Challenged Invention	Prior Art
	

(b) Although the specification of the Prior Art does disclose a rack-and-pinion structure, it merely shows a manner in which all of the rotating panels rotate in one direction so as to open and close. Nor does the specification of the Prior Art otherwise appear to

present any suggestion or motivation to connect a fitting protrusion to one side of a rotating panel so that adjacent rotating panels can rotate in opposite directions at the front of the showcase exterior, and to adopt a rack-and-pinion structure in which adjacent rotating panels rotate in mutually opposite directions; it is therefore determined that a person of ordinary skill in the art could not readily arrive at such a conception.

(c) In order to arrive at the Challenged Invention based on the Prior Art, the fitting protrusion to which the gear is connected at the center of the upper part of the rotating panel would have to be moved to one side (the fitting protrusions of adjacent rotating panels must be moved to the left and right ends, respectively), and the rack-and-pinion structure must be changed so that adjacent rotating panels can rotate in opposite directions. Even taking into account the well-known nature of the rack-and-pinion structure as discussed above, this appears to entail a considerable degree of alteration in configuration or design, and the resulting operational effect (the effect of eliminating interference with the internal display shelf in the course of rotation of the rotating panels and securing a wide opening width) also appears difficult to predict from the Prior Art.

(4) The Defendant's assertion is therefore not accepted.

F) Summary of the Results of the Examination

According to the foregoing examination, it is reasonable to find that the elements of Claim 4 at Issue and the corresponding elements of the Challenged Invention are equivalent.

3) Sub-conclusion

Accordingly, the Challenged Invention falls within the scope of rights of Claim 4 at Issue.

B. Determination on Claim 5 at Issue

Claim 5 at Issue is a dependent claim citing Claim 4 at Issue, and

adds to Claim 4 at Issue the following coupling structure between the rotating panels and the lower frame; the Challenged Invention also includes a structure identical to the coupling structure between the rotating panels and the lower frame of Claim 5 at Issue. The Challenged Invention therefore falls within the scope of rights of Claim 5 at Issue.

Claim 5 at Issue	Challenged Invention
A fitting protrusion (41) is mounted on the finishing cap (40) fitted to the lower part of the rotating panel (30), and the fitting protrusions (41) of the finishing caps (40) fitted to the lower parts of the rotating panels (30) are assembled into a plurality of fitting holes (23) formed in the lower frame (22)	A fitting protrusion (41') is mounted on the finishing cap (40') fitted to the lower part of the rotating panel (30'), and the fitting protrusions (41') of the finishing caps (40') fitted to the lower parts of the rotating panels (30') are assembled into a plurality of fitting holes (23') formed in the lower frame (22') (paragraph <8>)

C. Sub-conclusion

Taking together the foregoing, it is reasonable to find that the Challenged Invention falls within the scope of rights of the Patented Invention at Issue. The IPTAB Decision at Issue, which determined otherwise, is therefore unlawful.

4. Conclusion

Accordingly, the Plaintiff's claim seeking revocation of the IPTAB Decision at Issue is well-founded and is therefore granted, and the court renders its decision as set forth in the Order.

Presiding Judge Jaeryung KIM
Judge Kisu KIM
Judge Joung Woon YUN

IP HIGH COURT OF KOREA
FOURTH DIVISION
DECISION

Case No.	2024Heo13541 Scope of Rights Confirmation (Patent)
Plaintiff	Lite Pharm Tech Co., Ltd. Representative Director A Counsel for Plaintiff Patent Firm LICHAE, Patent Attorney in Charge Youngsik JOO
Defendant	RaQualia Pharma Inc. (ラクオリア 製薬株式會社) Representative Director B Counsel for Defendant Attorney Cheonwoo SON; Patent Attorneys Seokjae LEE, Jungmin PARK, Dayoung AHN, Sungshin CHO
Intervenor Supporting Defendant	HK inno.N Corporation Representative Director C Counsel for the Intervenor Patent Attorney Heejin KIM
Date of Closing Argument	December 12, 2024
Decision Date	January 23, 2025

ORDER

1. The Plaintiff's claim is dismissed.

2. Litigation costs, including the portion arising from the intervention, shall be borne in their entirety by the Plaintiff.

DEMAND FOR RELIEF

The IPTAB Decision 2023Dang685, decided June 5, 2024, shall be revoked.

OPINION

1. Basic Facts

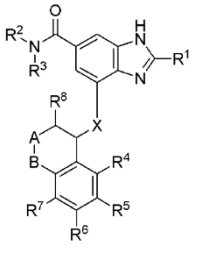
A. The Patented Invention at Issue (Plaintiff's Exhibits Nos. 1 and 2; Defendant's Exhibit No. 6)

1) International Filing Date / Date of Submission of Translation / Priority Claim Dates / Registration Date: December 6, 2006 / July 17, 2008 / December 19, 2005 and May 23, 2006 / November 23, 2011

2) Claims

Claim 1[1]. A compound of Formula I or a pharmaceutically acceptable salt thereof:

Formula I



wherein -A-B- is –O-CH_2-, –S-CH_2-, **–CH_2-O-**, or –CH_2-S-; X is an **oxygen atom** or NH; R^1 is a **C_1-C_6 alkyl group** that is unsubstituted or substituted with 1 to 2 substituents independently selected from the group consisting of a hydroxy group and a C_1-C_6 alkoxy group; R^2

1) Among the innumerable compounds expressed in Markush form in Claims 1 through 3, the compound having the combination of the underlined substituents, in which the substituents R5 = R7 are hydrogen atoms and the substituents R4 = R6 are fluorine atoms, is tegoprazan.

and R^3 are independently a hydrogen atom, a C_1-C_6 alkyl group, a C_3-C_7 cycloalkyl group, or a heteroaryl group that is a 5- to 6-membered ring containing one or more heteroatoms selected from N, O, and S, wherein the C_1-C_6 alkyl group, the C_3-C_7 cycloalkyl group, and the heteroaryl group are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of a halogen atom, a hydroxy group, a C_1-C_6 alkoxy group, a C_3-C_7 cycloalkyl group, an amino group, a C_1-C_6 alkylamino group, and a di(C_1-C_6 alkyl)amino group; or R^2 and R^3, together with the nitrogen atom to which they are attached, form a 4- to 6-membered heterocyclic group that is unsubstituted or substituted with 1 to 2 substituents selected from the group consisting of a hydroxy group, a C_1-C_6 alkyl group, a C_1-C_6 acyl group, and a hydroxy-C_1-C_6 alkyl group; R^4, R^5, R^6, and R^7 are independently a **hydrogen atom**, a **halogen atom**, a hydroxy group, a C_1-C_6 alkyl group, or a C_1-C_6 alkoxy group; and R^8 is a **hydrogen** atom, a hydroxy group, or a C_1-C_6 alkoxy group **(hereinafter "Claim 1 at Issue"; the remaining claims are referred to in the same manner, and Claims 1 through 6 at Issue together are referred to as the "Patented Invention at Issue")**.

Claim 2. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein X is an **oxygen atom**; R^2 and R^3 are independently a **C_1-C_6 alkyl group** or a C_3-C_7 cycloalkyl group, wherein the C_1-C_6 alkyl group and the C_3-C_7 cycloalkyl group are unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of a halogen atom, a hydroxy group, a C_1-C_6 alkoxy group, a C_3-C_7 cycloalkyl group, and a di(C_1-C_6 alkyl)amino group; or R^2 and R^3, together with the nitrogen atom to which they are attached, form an azetidinyl group, a pyrrolidinyl group, a piperazinyl group, or a morpholino group, wherein the azetidinyl group, the pyrrolidinyl group, the piperazinyl group, or the morpholino group is unsubstituted or substituted with a substituent selected from the group consisting of a hydroxy group, a C_1-C_6 alkyl group, a C_1-C_6 acyl group, and a

hydroxy-C_1-C_6 alkyl group; R^4, R^5, R^6, and R^7 are independently a **hydrogen atom**, **a halogen atom**, or a C_1-C_6 alkyl group; and R^8 is a **hydrogen atom**.

Claim 3. The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein -A-B is -O-CH_2- or **-CH_2-O-**; X is an **oxygen atom**; R^1 is a **C_1-C_6 alkyl group**; R^2 and R^3 are independently a **C_1-C_6 alkyl group** that is unsubstituted or substituted with 1 to 3 substituents independently selected from the group consisting of a hydroxy group and a C_1-C_6 alkoxy group; or R^2 and R^3, together with the nitrogen atom to which they are attached, form a pyrrolidinyl group that is unsubstituted or substituted with a substituent selected from the group consisting of a hydroxy group, a C_1-C_6 alkyl group, and a hydroxy-C_1-C_6 alkyl group; R^4, R^5, R^6, and R^7 are independently a **hydrogen atom, a halogen atom**, or a C_1-C_6 alkyl group; and R^8 is a **hydrogen atom**.

Claim 4. The compound according to Claim 1, wherein the compound is selected from the following compounds or pharmaceutically acceptable salts thereof: **4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide**[2]; 4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-2-methyl-6-(pyrrolidin-1-ylcarbonyl)-1H-benzimidazole; 4-[(5-fluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide.

Claim 5. The compound according to Claim 1, wherein the compound is selected from the following compounds or pharmaceutically acceptable salts thereof: **(-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide**[3]; (-)-4-[(5,7-difluoro-3,

2) This is one of the alternative names of tegoprazan and corresponds to the racemic form.

3) The optical rotation notation "(-)" limits the compound to tegoprazan in the form of the levorotatory optical isomer.

4-dihydro-2H-chromen-4-yl)oxy]-2-methyl-6-(pyrrolidin-1-ylcarbonyl)-1H-benzimidazole; (-)-4-[(5-fluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide.

Claim 6. A pharmaceutical composition comprising **the compound according to any one of Claims 1 to 5**, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, for treating gastrointestinal disease, gastroesophageal disease, gastroesophageal reflux disease (GERD), laryngopharyngeal reflux disease, peptic ulcer, gastric ulcer, duodenal ulcer, NSAID-induced ulcer, Helicobacter pylori infection, dyspepsia, functional dyspepsia, Zollinger-Ellison syndrome, non-erosive reflux disease (NERD), visceral referred pain, cancer, heartburn, nausea, esophagitis, dysphagia, salivation, airway disorder, or asthma.

Claim 7. (Text omitted as unrelated to the demand for relief)

Claims 8-9. (Deleted)

Claims 10-11. (Text omitted as unrelated to the demand for relief)

3) Principal Contents of the Invention

① **Technical Field**

[0001] The present invention relates to chromane-substituted benzimidazole derivatives. These compounds have selective acid pump inhibitory activity. The present invention also relates to compositions comprising said derivatives, methods of treatment, and uses thereof, for treating diseases mediated by acid pump modulating activity, in particular acid pump inhibitory activity.

② **Background Art**

[0002] It is well established that proton pump inhibitors (PPIs[4]) are

4) PPI is the abbreviation for Proton Pump Inhibitor. Proton means a positively charged subatomic particle. Since gastric acid, H+ (the hydrogen cation), is in a positively charged state, PPI is called a proton pump inhibitor.

prodrugs that undergo an acid-catalyzed chemical rearrangement enabling them to inhibit H^+/K^+-ATPase by covalently binding to its cysteine moieties [Sachs, G. et al., Digestive Diseases and Sciences, 1995, 40, 3S-23S; Sachs et al., Annu Rev Pharmacol Toxicol, 1995, 35, 277-305]. Unlike PPIs, however, acid pump antagonists inhibit acid secretion through reversible potassium-competitive inhibition of H^+/K^+-ATPase. SCH28080 is one such reversible inhibitor and has been extensively studied. Other, newer agents (revaprazan, soraprazan, AZD-0865, and CS-526) have entered clinical trials, and their efficacy in humans has been confirmed [Pope, A., Parsons, M., Trends in Pharmacological Sciences, 1993, 14, 323-5; Vakil, N., Alimentary Pharmacology and Therapeutics, 2004, 19, 1041-1049]. In general, acid pump antagonists have been **found useful for treating** a variety of diseases, including gastrointestinal disease, gastroesophageal disease, gastroesophageal reflux disease (GERD), laryngopharyngeal reflux disease, peptic ulcer, gastric ulcer, duodenal ulcer, non-steroidal anti-inflammatory drug (NSAID)-induced ulcer, gastritis, Helicobacter pylori infection, dyspepsia, functional dyspepsia, Zollinger-Ellison syndrome, non-erosive reflux disease (NERD), visceral referred pain, cancer, heartburn, nausea, esophagitis, dysphagia, salivation, airway disorder, and asthma [hereinafter "**APA[5] diseases**"; Kiljander, Toni O, American Journal of Medicine, 2003, 115 (Supplement 3A), 65S-71S; Ki-Baik Hahm et al., J. Clin. Biochem. Nutr., 2006, 38, (1), 1-8].

[0003] WO 04/054984 cites several compounds, such as indan-1-yl oxy benzimidazole derivatives, as acid pump antagonists.

[0004] There is a need for novel acid pump antagonists that are good drug candidates and address needs unmet by PPIs for treating diseases. Specifically, preferred compounds should bind potently to the acid pump while showing little affinity for other receptors, and should exhibit functional activity as inhibitors of gastric acid secretion. They should be well absorbed from the gastrointestinal tract, be metabolically stable, and possess favorable pharmacokinetic properties. They should be non-toxic. Furthermore, an ideal drug candidate will exist in a physical form that is stable, non-hygroscopic, and readily formulated.

③ Summary of the Invention

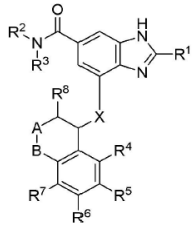
[0006] In the present invention, it has recently been found that a novel class

5) Acid Pump Antagonist

of compounds having a benzimidazole structure substituted with chromane moieties exhibits acid pump inhibitory activity and properties desirable in a drug candidate, and is therefore useful for treating diseases mediated by acid pump inhibitory activity, such as APA diseases.

[0007] The present invention provides a compound of the following Formula I, or a pharmaceutically acceptable salt thereof, or a prodrug thereof:

Formula I



[0008]

[0018] The present invention also provides a method of treating a disease mediated by acid pump inhibitory activity in a mammal, comprising administering to a mammal in need of treatment a therapeutically effective amount of a compound of Formula I as described herein, or a pharmaceutically acceptable salt thereof.

[0019] Examples of diseases mediated by acid pump inhibitory activity include, but are not limited to, APA diseases.

[0020] The present invention also provides the use of a compound of Formula I as described herein, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for treating a disease mediated by acid pump inhibitory activity.

[0021] There is provided the use of a compound of Formula I as described herein, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament.

[0022] The compounds of the present invention may exhibit good bioavailability, lower toxicity, good absorption, good distribution, good half-life, good solubility, lower protein binding affinity outside the acid pump, fewer drug-drug interactions, and good metabolic stability.

④ Detailed Description of the Invention

[0036] **The terms "treating" and "treatment"** as used herein refer to curative,

palliative, and **prophylactic** treatment, including reversing, alleviating, or inhibiting the progress of the disorder or disease to which such terms apply, or of one or more symptoms of such disorder or disease, or **preventing** such disorder or disease or one or more symptoms thereof.

[0343] Combinations

[0344] As discussed above, the compounds of the present invention exhibit acid pump inhibitory activity. Particularly in the treatment of gastroesophageal reflux disease, the acid pump antagonists of the present invention may usefully be combined with another pharmacologically active compound, or with two or more other pharmacologically active compounds. For example, an acid pump antagonist, specifically a compound of Formula I as defined above or a pharmaceutically acceptable salt thereof, may be administered simultaneously, sequentially, or separately together with one or more agents selected from the following:

[0345] histamine H2 receptor antagonists, for example ranitidine, lafutidine, nizatidine, cimetidine, ramotidine, and roxatidine;

[0346] (ii) proton pump inhibitors, for example omeprazole, esomeprazole, pantoprazole, rabeprazole, tenatoprazole, ilaprazole, and lansoprazole;

[0358] (xiv) agents for treating Helicobacter pylori infection, for example clarithromycin, roxithromycin, rokitamycin, flurithromycin, telithromycin, amoxicillin, ampicillin, temocillin, bacampicillin, aspoxicillin, sultamicillin, piperacillin, lenampicillin, tetracycline, metronidazole, bismuth citrate, and bismuth subsalicylate; (remainder omitted)

[0382] Methods for assessing biological activity:

[0383] The acid pump inhibitory activity and other biological activities of the compounds of the present invention were determined by the following procedures. (remainder omitted)

[0384] Preparation of gastric vesicles from fresh porcine stomach

[0385] Porcine gastric vesicles for the **porcine gastric H^+/K^+-ATPase inhibition assay** were prepared from the mucosa of fresh porcine stomach by homogenization with a tight-fitting polytetrafluoroethylene [Teflon (registered trademark)] homogenizer in 0.25 M sucrose at 4°C. Crude pellets were removed by centrifugation at 20,000 g for 30 minutes. The supernatant was then centrifuged at 100,000 g for 30 minutes. The resulting pellet was

resuspended in 0.25 M sucrose and then subjected to density gradient centrifugation at 132,000 g for 90 minutes. Gastric vesicles were collected from the interface on the 0.25 M sucrose layer containing 7% Ficoll™ PM400 [Amersham Biosciences]. This procedure was carried out in a cold room.

[0386] Ion-leaky porcine **gastric H^+/K^+-ATPase inhibition**

[0387] Ion-leaky porcine gastric H^+/K^+-ATPase inhibition was measured according to a modified method described in the literature [Biochemical Pharmacology, 1988, 37, 2231-2236].

[0390] Ion-tight porcine **gastric H^+/K^+-ATPase inhibition**

[0391] Ion-tight porcine gastric H^+/K^+-ATPase inhibition was measured according to a modified method described in the literature [Biochemical Pharmacology, 1988, 37, 2231-2236].

[0393] (opening omitted) The IC_{50} values of the inhibitory activity of the compounds of the Examples are set forth in Table 1 below.

[Table 1]

Example No.	IC_{50} (μM)
1	0.19
2	0.086
3	0.008
4	0.058
5	0.032
6	0.030
7	1.1
8	0.61
9	0.13
10	0.14
11	0.12
12	0.23
13	0.13
14	0.22
15	0.21
16	0.068
17	0.099
18	0.13
19	0.24
20	0.071
21	0.082
22	0.67
23	0.11
24	0.37
25	0.16

[0395] Canine renal Na^+/K^+-ATPase inhibition

[0397] **Inhibition of acid secretion** in lumen-perfused rats

[0398] Acid secretion in lumen-perfused rats was measured according to the method of Watanabe et al. [Watanabe et al., J. Physiol. (Paris) 2000; 94: 111-116].

[0401] **Inhibition of gastric acid secretion** in Heidenhain pouch dogs

[0402] Male beagle dogs weighing 7 to 15 kg having a Heidenhain pouch [Heidenhain: Arch Ges Physiol. 1879; 19: 148-167] were used.

[0403] **The compound of Example 2 exhibited excellent inhibitory activity.**

⑤ Examples

[0475] Example 1

[0476] 4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide[6)]

[0514] Step 9: 4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide

[0515] To a solution of 4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1-[(4-methylphenyl)sulfonyl]-1H-benzimidazole-6-carboxamide (280 mg, crude, Step 8) in tetrahydrofuran (8 mL) and methanol (4 mL) at room temperature was added sodium hydroxide (165 mg, 4.1 mmol). After stirring at room temperature for 1 hour, the mixture was quenched with saturated aqueous sodium dihydrogen phosphate and extracted with ethyl acetate. The organic layers were combined, dried over magnesium sulfate, and concentrated in vacuo. The residue was purified by column chromatography on silica gel (gradient elution from dichloromethane to ethyl acetate:methanol 10:1) to afford the title compound as a white solid (74 mg, 65% over two steps).

[0518] Example 2

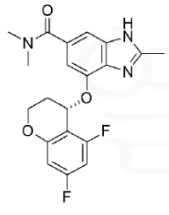
[0519] (-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide and

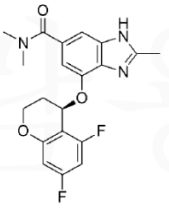
---

6) Example 1 is a racemic compound, and Examples 2 and 3 are, respectively, the levorotatory and dextrorotatory optical isomers obtained by optical resolution of the racemate of Example 1; the compound of Example 2 is the optical isomer

[0520] Example 3

[0521] (+)-4-[((4R)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide

Example 2 

Example 3 

[0523] Fraction-1 (582 mg) and Fraction-2 (562 mg) were prepared from racemic 4-4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,1,2-trimethyl-1H-benzimidazole-6-carboxamide (1.63 g, Step 9 of Example 1) by HPLC as follows:

[0528] (-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide (Fraction-1)

[0532] (+)-4-[((4R)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide (Fraction-2)

B. Application for Drug Item Approval, etc.

1) On September 6, 2017, the Intervenor supporting the Defendant, the exclusive licensee of the Patented Invention at Issue, applied for item approval of a single product, "K-CAB Tab. 50 mg"—a drug whose active ingredient is "tegoprazan," one of the compounds relating to the chromane-substituted benzimidazole derivatives of the Patented Invention at Issue—with the efficacies and effects of ❶ treatment of erosive gastroesophageal reflux disease (hereinafter "Efficacy and Effect ❶" or "Indication ❶"; the remaining efficacies and effects are referred to in the same manner) and ❷ treatment of non-erosive gastroesophageal reflux disease.

---

that is the active ingredient of K-CAB®.

2) On July 5, 2018, the Ministry of Food and Drug Safety, after reviewing safety and efficacy pursuant to the provisions of the Pharmaceutical Affairs Act, granted item approval for K-CAB Tab.

3) The Intervenor supporting the Defendant applied for item approval to add the following efficacies and effects to the already approved efficacies and effects of the K-CAB Tab. drug, and obtained the respective approvals of change from the Ministry of Food and Drug Safety.

Product number	Date of approval of change	Approved matters
❸	July 26, 2019	Treatment of gastric ulcer
❹	March 9, 2020	Combination therapy with antibiotics for eradication of Helicobacter pylori in patients with peptic ulcer and/or chronic atrophic gastritis
❺	July 20, 2022	Maintenance therapy after treatment of erosive gastroesophageal reflux disease

C. **Registration of Patent Term Extension** (hereinafter "Extension Registration at Issue")

1) Course of Registration (Plaintiff's Exhibit No. 1)

A) Filing Date / Application Number for Patent Term Extension: October 4, 2018 / No. 2018-0118522

B) Date of Extension Registration Decision / Period of Extension / (Scheduled) Expiration Date of the Registered Extended Term: February 20, 2020 / 1,723 days / **August 25, 2031**

2) Extension Registration (Gazette of Decisions on Registration of Patent Term Extension; Defendant's Exhibit No. 1)

A) Claims Subject to Extension: Claims 1 through 6 at Issue

B) Period of Extension: 1,723 days

C) Details of the Approval, etc. under Article 89 of the Patent Act[7)]

① Date on Which the Approval, etc. Was Obtained: July 5, 2018

② Content of the Approval (Content of the Registration): Item approval for manufacture and marketing of a drug, No. 5147, under Articles 31 and 42 of the Pharmaceutical Affairs Act

③ Chemical Name of the Active Ingredient: 7-[[(4S)-5,7-

---

7) Regulations on Product Approval, Notification, and Review of Drugs, Ministry of Food and Drug Safety Notice No. 2017-44 (partially amended on May 23, 2017)

Article 3 (Application for Approval of, and Notification of, Drugs) (2) Where a drug manufacturer or a consigning manufacturer-seller obtains manufacturing and marketing product approval, or files a manufacturing and marketing product notification, for each product in order to sell a drug, and where an importer obtains import product approval or files a product notification, a product falling under any of the following subparagraphs shall be applied for or notified as a single product. Provided, that even for products falling under the following subparagraphs, manufacturing and marketing product approval and import product approval must each be applied for as a separate product under a different product name, and the same applies to notifications.

1. In the case of an active pharmaceutical ingredient, products with the same ingredient name and specifications (standards)
2. <Deleted>
3. In the case of products other than those under subparagraph 1, preparations having the same content of the principal ingredient per unit dosage form and the same dosage form and route of administration (including cases where the hydrate differs). Provided, that the following items are excepted.
   A. Where the characteristics of the preparation are recognized within the scope of the same specifications. In such a case, where each single dose is the same, the raw materials and their quantities may be stated together for each size of the preparation, such as small pills, medium pills, and ○○ pills.
   B. Where, according to the results of a review under Article 3(3) or Article 5 of the Regulations on Drug Classification Criteria (Ministry of Food and Drug Safety Notice) or the results of a drug classification reassessment under the Regulations on the Implementation of Drug Reassessment (Ministry of Food and Drug Safety Notice), approval or notification is sought as a prescription drug and as a non-prescription drug with different efficacies and effects
   C. In the case of a drug intended solely for export

difluoro-3,4-dihydro-2H-chromen-4-yl]oxy]-N,N,2-trimethyl-3H-benzimidazole-5-carboxamide

④ Generic Name (Product Name): Tegoprazan

⑤ Brand Name (Trade Name): K-CAB Tab. 50 mg (K-CAB tab. 50mg)

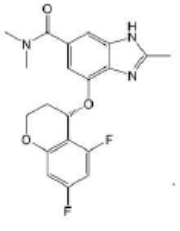
⑥ Efficacy and Effect (Use)

❶ Treatment of erosive gastroesophageal reflux disease

❷ Treatment of non-erosive gastroesophageal reflux disease

D. The Challenged Invention

A pharmaceutical composition for combination therapy with antibiotics for eradication of Helicobacter pylori in patients with peptic ulcer and/or chronic atrophic gastritis, comprising a compound of Formula 1 below or a pharmaceutically acceptable salt thereof.

[Formula 1] 

E. Procedural History of the IPTAB Decision at Issue

1) On February 7, 2023, the Plaintiff filed with the Intellectual Property Trial and Appeal Board (hereinafter the “IPTAB”), against the Defendant as the patentee of the Patented Invention at Issue, a petition for negative trial to confirm the scope of rights with respect to the Challenged Invention, asserting that “the Challenged Invention does not fall within the scope of protection of Claims 1 through 6 at Issue, the term of which has been extended.”

2) The IPTAB examined the Plaintiff’s petition as Case No. 2023Dang685 and, on June 5, 2024, rendered the IPTAB Decision at Issue dismissing that petition.

[Factual basis] Undisputed facts; the statements in Plaintiff's Exhibits Nos. 1 through 3 and Defendant's Exhibits Nos. 1, 2, 6, and 24; the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

For the following reasons, the Challenged Invention does not fall within the scope of rights of the Patented Invention at Issue, the term of which has been extended; the IPTAB Decision at Issue, which reached a different conclusion, is therefore unlawful.

1) Patent term extension must be determined based on the approved matters that formed the ground for the extension registration. Where a specific use has been designated for the object of the approval, etc. that formed the ground for the extension registration, the effect of an extended patent right, as provided in Article 95 of the Patent Act, is limited to that use; and the "specific use" is the efficacy and effect for which the initial item approval was obtained under the Pharmaceutical Affairs Act. Accordingly, the effect of an extended patent right extends only to the "matters initially approved" among the "efficacies and effects of the drug" for which item approval was obtained under the Pharmaceutical Affairs Act.

2) The subject of the Extension Registration at Issue is a drug whose efficacies and effects are Indications ❶ and ❷ (treatment of erosive and non-erosive gastroesophageal reflux disease), for which item approval was initially obtained, and the effect of the extended patent right extends only to the practice of that drug. The medicinal use of the Challenged Invention is "combination therapy with antibiotics for eradication of Helicobacter pylori in patients with peptic ulcer and/or chronic atrophic gastritis," which is the same as Indication ❹, for which additional item approval was obtained for "K-CAB Tab. 50 mg,"

but which differs from Indications ❶ and ❷ in the object of item approval, so that the effect of the extended patent right does not extend to it. The Challenged Invention therefore does not fall within the scope of rights of the Patented Invention at Issue.

B. The Defendant

For the following reasons, the Challenged Invention falls within the scope of rights of the Patented Invention at Issue, the term of which has been extended; the IPTAB Decision at Issue, which reached the same conclusion, is therefore lawful.

1) The patent term extension system is intended to provide incentives for efforts to develop new drugs and to compensate for the period of non-practice caused by approval and the like; and since Article 95 of the Patent Act provides that the scope of effect of an extended patent right is the "practice of the patented invention," the scope of effect of an extended patent right must be determined by whether the "active ingredient, therapeutic effect, and use" are identical. The "use" in Article 95 of the Patent Act must not be confined to the "efficacy and effect" for which the initial item approval was obtained under the Pharmaceutical Affairs Act, but must be determined as the "medicinal use" under the Patent Act, taking into account the technical significance of the specification of the patented invention.

2) Indications ❶ and ❷, for which the initial item approval was obtained, and Indication ❹, for which additional item approval was obtained, are all "acid-related diseases treated by inhibiting gastric acid secretion," and the technical significance of the Patented Invention at Issue lies in having created a novel tegoprazan compound usable for Indications ❶, ❷, and ❹. Indications ❶, ❷, and ❹ are therefore all identical in "therapeutic effect and use."

The Patented Invention at Issue and the Challenged Invention both concern novel compounds such as tegoprazan, and the therapeutic

effect and use of the Challenged Invention are the same as Indication ❹ added among the efficacies and effects of "K-CAB Tab. 50 mg"; accordingly, the drug that formed the basis of the term extension of the Patented Invention at Issue and the Challenged Invention are identical in active ingredient, therapeutic effect, and use. The Challenged Invention therefore falls within the scope of rights of the Patented Invention at Issue.

3. Whether the IPTAB Decision at Issue Is Unlawful

A. Whether the Challenged Invention Falls Outside the Scope of Rights of the Patented Invention at Issue

1) Relevant Provisions and Legal Principles

A) Article 89(1) of the former Patent Act (before amendment by Act No. 14112 of March 29, 2016; hereinafter "former Patent Act") provides: "Where, in order to practice a patented invention, approval must be obtained or registration, etc. must be made under other statutes, and the invention is one prescribed by Presidential Decree that requires a long period of time owing to the testing of efficacy, safety, etc. necessary for such approval or registration, etc. (hereinafter 'approval, etc.'), the term of the patent right may, notwithstanding Article 88(1), be extended only once, for up to five years, for the period during which the invention could not be practiced." Pursuant to that delegation, Article 7, subparagraph 1 of the former Enforcement Decree of the Patent Act (before amendment by Presidential Decree No. 30844 of July 14, 2020; the same applies hereinafter) prescribes, as one of the "inventions requiring a long period of time owing to the testing of efficacy, safety, etc. necessary for approval, etc.," "an invention of a drug for which item approval has been obtained under Article 31(2) or (3) or Article 42(1) of the Pharmaceutical Affairs Act in order to practice the patented invention [limited to a drug manufactured using a new substance (meaning a

substance whose efficacy-exhibiting active component has a novel chemical structure; the same applies hereinafter in this Article) as its active ingredient and for which item approval was obtained for the first time]."

As to the effect of an extended patent right, Article 95 of the former Patent Act provides that it "extends only to acts of practicing the patented invention with respect to the object of the approval, etc. that formed the ground for the extension registration (where a specific use has been designated for the object in that approval, etc., the object used for that use)." In thus prescribing the scope of an extended patent right, the Patent Act does not use the claims as the standard but merely mentions "**the practice of the patented invention** with respect to the object of the approval, etc. that formed the ground for the extension registration," without limiting it to the practice of the "product" subject to the approval, etc. In light of such statutory provisions and the purport of the system, the scope of an extended pharmaceutical patent right must be determined chiefly by whether the specific active ingredient, therapeutic effect, and use expected to exhibit a therapeutic effect on a specific disease are identical to those of the drug for which item approval was obtained under the Pharmaceutical Affairs Act in order to practice the patented invention (see Supreme Court Decision 2017Da245798, decided January 17, 2019).

B) The Challenged Invention relates to a pharmaceutical composition, comprising tegoprazan, for combination therapy with antibiotics for eradication of Helicobacter pylori in patients with peptic ulcer and/or chronic atrophic gastritis, and its therapeutic effect and use correspond to ❹ among the efficacies and effects of K-CAB Tab. Whether the effect of the patent right at issue, the term of which has been extended, extends to the Challenged Invention must be determined chiefly by whether the specific active ingredient, therapeutic effect, and use expected to exhibit a therapeutic effect are identical as between the object of the approval, etc. that formed the ground for the extension

registration and the Challenged Invention; accordingly, the court first examines whether the active ingredients expected to exhibit a therapeutic effect are identical, and then determines whether the therapeutic effect and use are identical.

2) Whether the Active Ingredients Are Identical

A) The Active Ingredient of the Object That Formed the Basis of the Extension (Defendant's Exhibits Nos. 1, 2, and 24)

The Patented Invention at Issue was recognized as an invention of a drug requiring approval under the Pharmaceutical Affairs Act and its patent term was accordingly extended; the object of that approval is the K-CAB Tab. drug, for which item approval was obtained for the first time on July 5, 2018 using as its active ingredient a new substance whose efficacy-conferring active component has a novel chemical structure (hereinafter "**Object of Approval at Issue**"[8]), and the new substance exhibiting therapeutic efficacy here is "tegoprazan," the active ingredient of K-CAB Tab.

B) The Patented Invention Relating to the Practice of the Object of the Approval, etc. That Formed the Ground for the Extension Registration

Even though, before the extension registration, Claims 1 through 3 at Issue included numerous compounds within their scope of protection by means of the Markush format, the effect of the Patented Invention at Issue is limited by Article 95 of the former Patent Act to the practice of the patented invention with respect to the Object of Approval at Issue. Accordingly, the effect of the term extension extends only to tegoprazan, the active ingredient of the object that formed the basis of the extension.

That is, in the case of Claims 1 through 3 at Issue, for which the

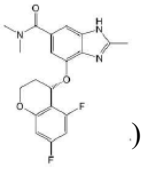
8) The object of the approval or the like that constituted the ground for the extension registration under Article 95 of the former Patent Act.

patent term has been extended, the effect extends only to a compound of Formula I among the compounds stated in the Markush format in which substituents A and B are $^{-}CH_2$-O-, substituent X is an oxygen atom, substituent R^1 is methyl, a C_1 alkyl, substituents R^2 and R^3 are methyl, a C_1 alkyl, substituents R^4 and R^6 are hydrogen atoms, substituents R^5 and R^7 are fluoro among the halogen atoms, and substituent R^8 is a hydrogen atom.

Although Claims 4 and 5 at Issue likewise include a plurality of compounds, the effect of the term extension extends only to the compounds corresponding to tegoprazan, namely 4-[(5,7-difluoro-3, 4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide and (-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl) oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide.

Claim 6 at Issue is a medicinal use invention comprising, as its active ingredient, a compound according to any one of Claims 1 through 5 at Issue. Accordingly, only a medicinal use invention whose active ingredient is the compound corresponding to "tegoprazan" among the compounds stated in the respective cited claims constitutes the patented invention relating to the practice of the object of the approval, etc. to which the effect of the extended patent right extends.

C) The Active Ingredient of the Challenged Invention

Since the Challenged Invention relates to a pharmaceutical composition comprising a compound of Formula 1, the compound of Formula 1 constitutes the active ingredient. The chemical structure of Formula 1 () is "(-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl) oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide," that is, tegoprazan.

D) Result of the Comparison

The active ingredient of the Object of Approval at Issue, which

formed the ground for the extension registration, and that of the Challenged Invention are both "tegoprazan" and are thus identical to each other (there is no dispute between the parties on this point).

3) Whether the Therapeutic Effect and Use Are Identical

A) The Issue

Whether the Challenged Invention falls within the scope of rights of the patented invention whose term has been extended depends, in addition to identity of active ingredient, on whether the therapeutic effect and use are identical; and, as discussed above, under Article 95 of the former Patent Act the effect of an extended patent right is limited to "that use, where a specific use has been designated for the object of the approval, etc. that formed the ground for the extension registration."

If the "use" here were confined to the "indication" initially approved under the Pharmaceutical Affairs Act, the extended patent right would cover only the practice of the patented invention relating to Indications ❶ and ❷ of the Object of Approval at Issue, and would not extend to the practice of the patented invention relating to Indication ❹, for which additional approval was obtained. In that case, since the effect of the extended patent right would not extend to the Challenged Invention, whose therapeutic effect and use are identical to Indication ❹, it would be difficult to find that the Challenged Invention falls within the scope of rights of the Patented Invention at Issue.

However, where the "use" in Article 95 of the former Patent Act is to be regarded not as confined to the indication or efficacy and effect of the initial item approval under the Pharmaceutical Affairs Act, but as the "therapeutic effect and use" under the Patent Act as determined by taking into account the technical significance of the patented invention and the like, then if it is determined that, in light of the statements in the specification of the patented invention and the technical common sense at the time of filing, the therapeutic effect

and use in the practice of the patented invention relating to Indications ❶ and ❷, for which the initial item approval was obtained, and in the practice of the patented invention relating to Indication ❹, for which additional approval was obtained, are substantially identical, then the effect of the patent right at issue, the term of which has been extended, extends to the practice of the patented invention relating to Indication ❹, and the Challenged Invention, whose therapeutic effect and use are identical to Indication ❹, may accordingly be regarded as falling within the scope of rights of the Patented Invention at Issue.

Ultimately, the issue in this case is whether the "use" in Article 95 of the former Patent Act must be confined solely to the "indication" initially approved under the Pharmaceutical Affairs Act, or may be determined specifically and individually taking into account the technical significance of the patented invention (hereinafter "Issue 1"). If it is to be determined in the latter manner, the court then examines whether the therapeutic effect and use in the practice of the patent relating to Indications ❶ and ❷ and in the practice of the patent relating to Indication ❹, for which additional approval was obtained, are identical, so that the effect of the patent right at issue, the term of which has been extended, also extends to the practice of the patented invention relating to Indication ❹ (hereinafter "Issue 2").

B) Determination on Issue 1

Taking together the following circumstances, the "act of practicing the patented invention" provided in Article 95 of the former Patent Act, and the "identity of therapeutic effect and use" as the scope of an extended patent right, should not be confined to the "efficacy and effect" initially approved under the Pharmaceutical Affairs Act, but should be determined based on whether the "therapeutic effect and medicinal use under the Patent Act" of the object of approval are substantially identical, taking into account the specification of the patented invention and the like.

① As discussed above: the significance of the patent term

extension system lies in providing a form of compensation for efforts to develop new drugs by extending the term of the patent right for the period during which the patented invention could not be practiced owing to approval, etc.; under Articles 89 and 95 of the former Patent Act, even where extension is determined by reference to "initial item approval," what is extended is not the "drug for which initial item approval was obtained" but the "patented invention" itself, with only its scope of effect being limited to "the practice of that patented invention with respect to the object of the approval, etc. that formed the ground for the extension registration"; and in light of such purport of the patent term extension system and the provisions of the Patent Act, the scope of an extended pharmaceutical patent right must be determined chiefly by whether the specific active ingredient, therapeutic effect, and use expected to exhibit a therapeutic effect on a specific disease are identical to those of the drug for which item approval was obtained under the Pharmaceutical Affairs Act in order to practice the patented invention.

Accordingly, even where extension of the term is determined by reference to "initial item approval," what is extended is not the "drug for which initial item approval was obtained" but the "patented invention" itself, and the effect of an extended patent right is merely narrower in scope than the pre-extension patent right, being limited to the "practice" of the patented invention with respect to the object of the approval, etc.

② The Patent Act aims to contribute to the development of industry by promoting the development of technology through protecting and encouraging inventions and promoting their utilization; whereas the Pharmaceutical Affairs Act aims to contribute to the improvement of public health by prescribing matters necessary for pharmaceutical affairs to be conducted smoothly. Their purports thus differ.

"Medicinal use" under the Patent Act overlaps with the "efficacy and effect" among the matters approved for a drug under the Pharmaceutical

Affairs Act, in that it is an indication treatable with the drug. In a medicinal use invention, however, the use, in addition to the particular substance, constitutes the invention, and that medicinal use is expressed, apart from widely known pharmacological mechanisms, as an effect corresponding to the diagnosis, treatment, alleviation, management, or prevention of a disease, or as a target disease. By contrast, the "efficacy and effect" in item approval of a drug under the Pharmaceutical Affairs Act must indicate, as specifically as possible within the range recognized in medicine and pharmacy, the name of a disease or symptom for which the drug's efficacy can be clearly demonstrated (實證), and must define the target disease or symptom separately for treatment, prevention, and diagnosis[9]; this appears to be because the degree to which efficacy is demonstrated is evaluated differently according to the medical history, severity, and the like of the recruited subjects.

Moreover, there is also a difference in that a medicinal use invention, as a specific efficacy protected as a single invention, may be approved as a drug having a plurality of efficacies and effects, whereas the "efficacy and effect" in item approval under the Pharmaceutical Affairs Act must, given the purport of the system, be clearly indicated as a specific disease or symptom whose safety and efficacy have been

9) General Considerations in Reviewing Drug Approval Matters (published by the Ministry of Food and Drug Safety; Ministry of Food and Drug Safety, Approval Coordination Division, 13th revision, April 6, 2022, pages 21–22)
3.3.5. Efficacy and Effect
A. This item shall be prepared on the basis of the safety and efficacy of the product derived from the results of adequately planned and well-controlled clinical trials. Only the efficacies and effects approved by the Ministry of Food and Drug Safety may be included.
B. This item shall be described clearly and concisely.
· The target disease or symptom (in the case of antibiotics, the infection and the susceptible bacterial species shall be stated)
- The target disease or symptom must be defined by distinguishing among treatment (symptomatic therapy, cure, or mitigation of the course of progression of the disease), prevention (primary or secondary), diagnosis, and the like.

confirmed through clinical trials.[10)]

In light of such purports of the Patent Act and the Pharmaceutical Affairs Act and the differences in the objectives and modes of operation of the term extension system and the item approval system, it is difficult to find any particular reason to treat the "use" under the Patent Act as identical to the "efficacy and effect" under the Pharmaceutical Affairs Act; nor is there any statutory basis for finding that the "use" for determining the scope of effect of an extended patent right must be construed as the "efficacy and effect" of the drug approved under the Pharmaceutical Affairs Act.

③ Even where a patented invention has a plurality of efficacies and effects and the patentee conducts the related clinical trials simultaneously in order to obtain item approval for each efficacy and effect, it is practically impossible to secure the efficacy and safety test data and the like for all efficacies and effects at the same time, owing to differences in the therapeutic confirmation guidelines required for each indication, the ease of recruiting subjects, and the like. Furthermore, there is neither reason nor need to compel a patentee to wait until test data relating to all efficacies and effects have been obtained and then apply for item approval simultaneously. A patentee may also adopt a strategy of applying separately for item approval by efficacy and effect according to market conditions or sales policy, or of applying for item approval for some indications and then obtaining additional item approval even for the same efficacy and effect. In light

10) A therapeutic confirmatory trial corresponds to a Phase 3 clinical trial (Defendant's Exhibit No. 36; Plaintiff's Exhibits Nos. 7 and 8), and the drug subject to the approval at issue likewise states its "efficacy and effect" as efficacies and effects ❶ and ❷ on the basis of the patient groups enrolled as subjects in the pivotal studies (patients with erosive gastroesophageal reflux disease and patients with non-erosive gastroesophageal reflux disease) (Defendant's Exhibit No. 24, Section 6.5.2).
That is, "efficacy and effect" appropriate to that trial model may be formulated and an application for product approval may be filed only after efficacy and safety have been substantiated for the patient group enrolled in a Phase 3 clinical trial.

of such practice regarding the item approval system, it is difficult to find that the “use” under the Patent Act, as a standard for determining the scope of effect of an extended patent right, necessarily coincides with the “efficacy and effect” of item approval under the Pharmaceutical Affairs Act.

④ Item approvals under the Pharmaceutical Affairs Act are treated separately depending on the time of application; if item approvals were taken as the standard for determining therapeutic effect or use, the identity of “therapeutic effect and use” could only be determined by “item approval,” a form of administrative act, rather than by the technical significance of the patented invention. Comparing the case where approval is obtained by applying simultaneously for several indications at the time of the initial item approval application with the case where approvals are obtained sequentially, the unreasonable result arises that, despite the patented invention being the same, the effect of the extended patent right is broader in the former case than in the latter.

⑤ Conversely, if Article 95 of the Patent Act were understood as extending the scope of the extended patent right to all efficacies and effects approved before expiration of the patent term, irrespective of identity of the technical concept of the patented invention, the problem could arise that protection is excessive relative to the technical concept contributed by the patented invention. Identity of active ingredient does not necessarily mean that the therapeutic effect or use is the same[11]: even where drugs with the same active ingredient exert their effect through the same mechanism, the effect manifested and the therapeutic use may differ according to the organ

11) Since “치료” (treatment) means “managing an illness or injury so as to cure it,” a “therapeutic effect” may be defined as “any kind of post-treatment response judged to be useful or beneficial in its result.”
Since “용도” (use) means “the way in which, or the place where, something is used,” a “medicinal use” may be defined as “the manner in which, or the place where, a drug that prevents or treats a disease is used.”

or tissue on which the drug acts, the type of disease, the pathology, and the like; and conversely, the same therapeutic effect or use does not necessarily mean the same active ingredient and mechanism of action.[12)]

⑥ Ultimately, taking together the objectives of the Patent Act and the Pharmaceutical Affairs Act, the respective purports of the patent term extension system and the drug item approval system, and their specific modes of operation, it is reasonable to find that the "use" under the Patent Act, as a standard for determining the scope of effect of an extended patent right, includes not only the "indication for which the initial item approval was obtained" in the drug approval, but also indications of drugs used for the prevention and treatment of substantially identical diseases. And whether the "use" is identical must be determined specifically and individually, taking comprehensively into account the technical significance or the core of the inventive concept of the patented invention as grasped through the statements in the specification and the like, the identity of the pharmacological mechanism, the specific site of application such as the target organ or tissue, the target pathology, the actual state of use including prescription practices, and other factors.

C) Determination on Issue 2 — Whether Indications ❶ and ❷ and Indication ❹ Are Identical

According to the following facts and circumstances, which are established by the evidence cited above, the statements in Defendant's Exhibits Nos. 7 through 23, and the overall purport of the pleadings and oral arguments, Efficacies and Effects ❶ and ❷, for which the initial item approval was obtained, and Efficacy and Effect ❹, for which additional approval was obtained, all substantially implement the

12) An "antacid" and a "proton pump inhibitor" are the same in their therapeutic effect and use, in that both are drugs used to treat gastric ulcers by lowering the concentration of acid in the stomach, but their active ingredients and mechanisms of action are entirely different.

medicinal use of "treating acid-related diseases through inhibition of gastric acid secretion by acid pump antagonism," which is the distinctive technical concept disclosed by the Patented Invention at Issue; and Indications ❶, ❷, and ❹ all belong to "acid-related diseases" treatable on the basis of the therapeutic effect of "inhibition of gastric acid secretion through a potassium-competitive acid blocker ('P-CAB') having a mechanism of inhibiting the proton pump," disclosed in the Patented Invention at Issue, and their use is therefore identical.

① The Patented Invention at Issue is a substance invention relating to chromane-substituted benzimidazole derivatives for treating acid-related diseases mediated by acid pump inhibitory activity; among these, Claims 1 through 5 of the Patented Invention at Issue are inventions relating to compounds of Formula I, including 7-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-3H-benzimidazole-5-carboxamide (the chemical name of the active ingredient compound of "K-CAB Tab.," the drug approved in this case, whose generic name is "tegoprazan"), or pharmaceutically acceptable salts thereof.

The specification of the Patented Invention at Issue states, as a technical feature of that patented invention, that it "provides novel chromane-substituted benzimidazole compounds that have the effect of 'inhibiting acid secretion through reversible potassium-competitive inhibition of H^+/K^+-ATPase' and thus act as acid pump antagonists addressing needs unmet by proton pump inhibitors (hereinafter 'PPIs')" (paragraphs [0001], [0002], [0004], [0006], and others), and discloses numerous "acid-related diseases treated by inhibiting gastric acid secretion through inhibition of the acid pump (Acid Pump Antagonist diseases; hereinafter 'APA diseases')," including Indications ❶, ❷, and ❹.

Taking these statements in the specification together, it can be seen that the Patented Invention at Issue is a substance patent characterized by providing tegoprazan compounds having a specific basic skeleton for treating acid-related diseases mediated by acid pump inhibitory activity, and that its technical significance lies in providing a novel gastric acid secretion inhibitor of the P-CAB class.

The Patented Invention at Issue
(Plaintiff's Exhibit No. 2; Defendant's Exhibit No. 6)

Technical Field

[0001] The present invention relates to chromane-substituted benzimidazole derivatives. These **compounds have selective acid pump inhibitory activity**. The present invention also relates to compositions comprising said derivatives, methods of treatment, and uses thereof, for **treating diseases mediated by** acid pump modulating activity, in particular **acid pump inhibitory activity**.

Background Art

[0002] It is well established that proton pump inhibitors (PPIs) are prodrugs that undergo an acid-catalyzed chemical rearrangement enabling them to inhibit H^+/K^+-ATPase by covalently binding to its cysteine moieties. **Unlike PPIs, however, acid pump antagonists inhibit acid secretion through reversible potassium-competitive inhibition of H^+/K^+-ATPase**. SCH28080 is one such reversible inhibitor and has been extensively studied. Other, newer agents (revaprazan, soraprazan, AZD-0865, and CS-526) have entered clinical trials, and their efficacy in humans has been confirmed [omitted]. **In general, acid pump antagonists have been found useful for treating** a variety of diseases, including gastrointestinal disease, gastroesophageal disease, gastroesophageal reflux disease (GERD), laryngopharyngeal reflux disease, peptic ulcer, gastric ulcer, duodenal ulcer, non-steroidal anti-inflammatory drug (NSAID)-induced ulcer, gastritis, Helicobacter pylori infection, dyspepsia, functional dyspepsia, Zollinger-Ellison syndrome, non-erosive reflux disease (NERD), visceral referred pain, cancer, heartburn, nausea, esophagitis, dysphagia, salivation, airway disorder, and asthma [hereinafter "APA diseases"; omitted].

[0004] There is a need for novel acid pump antagonists that are good drug candidates and address needs unmet by PPIs for treating diseases. Specifically, preferred compounds should bind potently to the acid pump while showing little affinity for other receptors, and should exhibit functional activity as inhibitors of gastric acid secretion. (remainder omitted)

[0005] Summary of the Invention

[0006] In the present invention, it has recently been found that a novel class of compounds having a benzimidazole structure substituted with chromane moieties exhibits **acid pump inhibitory activity and properties desirable in a drug candidate, and is therefore useful for treating diseases mediated by acid pump inhibitory activity, such as APA diseases**.

[0018] The present invention also provides a method of treating a disease

mediated by acid pump inhibitory activity in a mammal, comprising administering to a mammal in need of treatment a therapeutically effective amount of a compound of Formula I as described herein, or a pharmaceutically acceptable salt thereof.

[0019] Examples of diseases mediated by acid pump inhibitory activity include, but are not limited to, APA diseases.

[0020] The present invention also provides the use of a compound of Formula I as described herein, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for treating a disease mediated by acid pump inhibitory activity.

Detailed Description of the Invention

[0036] **The terms "treating" and "treatment"** as used herein refer to curative, palliative, and **prophylactic** treatment, including reversing, alleviating, or inhibiting the progress of the disorder or disease to which such terms apply, or of one or more symptoms of such disorder or disease, or **preventing** such disorder or disease or one or more symptoms thereof.

[0344] As discussed above, the compounds of the present invention exhibit **acid pump inhibitory activity**. Particularly in the treatment of gastroesophageal reflux disease, the acid pump antagonists of the present invention may usefully be combined with another pharmacologically active compound, or with two or more other pharmacologically active compounds. For example, an acid pump antagonist, specifically a compound of Formula I as defined above or a pharmaceutically acceptable salt thereof, may be administered simultaneously, sequentially, or separately together with one or more agents selected from the following:

② The specification of the Patented Invention at Issue discloses test methods to verify in vivo activity in order to evaluate the practical utility of the chromane-substituted benzimidazole derivative compounds as pharmaceutical compounds based on their "potassium-competitive inhibition of acid secretion." It also specifically states that the Patented Invention at Issue has a pharmacological advantage of excellent inhibitory activity in an in vitro test (ion-tight porcine gastric H^+/K^+-ATPase inhibition) and in animal tests [inhibition of acid secretion in lumen-perfused rats; inhibition of gastric acid secretion in Heidenhain pouch dogs] (Table 1, paragraph [0400], and others).

Accordingly, it can be seen that, unlike conventional PPIs, which exhibit a "gastric H^+/K^+-ATPase inhibition" effect through covalent bonding, the Patented Invention at Issue has the effect of "**inhibiting acid secretion through reversible potassium-competitive inhibition of H^+/K^+-ATPase**." The core of the inventive concept of the Patented Invention at Issue is therefore to provide "**novel compounds acting as acid pump antagonists**" that address needs unmet by PPIs for treating diseases mediated by inhibition of acid pump activity, such as APA diseases.

The Patented Invention at Issue
(Plaintiff's Exhibit No. 2; Defendant's Exhibit No. 6)

[0382] Methods for assessing biological activity:

[0383] The **acid pump inhibitory activity** and other biological activities of the compounds of the present invention were determined by the following procedures.

[0386] Ion-leaky porcine **gastric H^+/K^+-ATPase inhibition**

[0387] Ion-leaky porcine gastric H^+/K^+-ATPase inhibition was measured according to a modified method described in the literature [Biochemical Pharmacology, 1988, 37, 2231-2236].

[0390] Ion-tight porcine gastric **H^+/K^+-ATPase inhibition**

[0391] Ion-tight porcine gastric H^+/K^+-ATPase inhibition was measured according to a modified method described in the literature [Biochemical Pharmacology, 1988, 37, 2231-2236].

[0394]

Table 1

Example No.	IC_{50} (μM)
1	0.19
2	0.086
3	0.098
4	0.058
5	0.032
6	0.030
7	1.1
8	0.61
9	0.13
10	0.14
11	0.12
12	0.23
13	0.13
14	0.22
15	0.21
16	0.068
17	0.099
18	0.13
19	0.24
20	0.071
21	0.082
22	0.57
23	0.11
24	0.37
25	0.16

[0395] Canine renal Na^+/K^+-ATPase inhibition

[0397] Inhibition of acid secretion in lumen-perfused rats

[0398] Acid secretion in lumen-perfused rats was measured according to the method of Watanabe et al. [Watanabe et al., J. Physiol. (Paris) 2000; 94: 111-116].

[0401] Inhibition of gastric acid secretion in Heidenhain pouch dogs

[0403] The compound of Example 2 exhibited excellent inhibitory activity.

[0475] Example 1

[0476] 4-[(5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide

[0518] Example 2

[0519] (-)-4-[((4S)-5,7-difluoro-3,4-dihydro-2H-chromen-4-yl)oxy]-N,N,2-trimethyl-1H-benzimidazole-6-carboxamide

③ The following were well known to a person of ordinary skill in the art: that the mechanism of inhibiting gastric acid secretion had been utilized in treating acid-related diseases arising in the stomach even before the priority claim date of the Patented Invention at Issue (December 19, 2005)[13]; that, although acid secretion involves multiple pathways, gastric acid is ultimately secreted through the action of H^+/K^+-ATPase; that "proton pump inhibitors" in the broad sense include PPIs and P-CABs, and that the above drugs are all used in treating acid-related diseases; and that, in particular, once PPIs — which had been used as the first-line drugs among gastric acid secretion inhibitors — were found to have disadvantages such as the inconvenience of pre-meal administration, slow onset of action, and contraindications for concomitant use, research on P-CABs was actively pursued in order to overcome these.[14]

13) See [Appendix 1] (contents omitted).

14) Defendant's Exhibit No. 19, page 60; Defendant's Exhibit No. 20, page 25; Defendant's Exhibit No. 21, page 1383, introduction; Defendant's Exhibit No. 22, abstract; Defendant's Exhibit No. 23, abstract and page 267; and others.

④ It can also readily be confirmed, from pharmacology textbooks, treatment guidelines, and various academic papers published before the filing date of the application in this case, that gastroesophageal reflux disease (GERD) including non-erosive reflux disease (NERD), duodenal ulcer, and gastric ulcer were known as acid-related diseases treated by inhibiting acid secretion through blockade of H^+/K^+-ATPase[15], and that in treating peptic ulcer and atrophic gastritis caused by Helicobacter pylori as well, a therapy utilizing the synergistic effect of concomitant administration of an antibacterial agent and a PPI had been established as the standard regimen.[16]

In particular, Indications ❶ and ❷ are diseases arising from reflux of gastric contents into the esophagus, for which treatment methods neutralizing acid in the stomach or inhibiting acid secretion are used in order to eliminate or reduce irritation of the esophageal mucosa by the refluxate; and Indication ❹ relates to treatment that removes Helicobacter pylori with antibiotics and prevents the pain and ulcer progression caused by gastric acid secreted at sites of gastritis or gastric ulcer arising from infection with that bacterium, so that treatment neutralizing acid in the stomach or inhibiting acid secretion is essential. That the target diseases relating to Efficacies and Effects ❶, ❷, and ❹ are acid-related diseases treatable through inhibition of gastric acid secretion is merely a matter of technical knowledge already widely known before the filing date of the application in this case.[17]

⑤ Various pharmacology textbooks and treatment guidelines propose the use of PPIs and P-CABs in treating gastroesophageal reflux disease relating to Indications ❶ and ❷[18]; combination therapy

15) The statements in Defendant's Exhibits Nos. 19 through 23.

16) Defendant's Exhibit No. 19, page 166; Defendant's Exhibit No. 20, abstract and pages 22 and 31; Defendant's Exhibit No. 21, pages 1383, 1392, and 1393; Defendant's Exhibit No. 22, page 22; Defendant's Exhibit No. 23, abstract and page 274; and others.

17) See Appendices 1 and 2 (contents omitted).

18) Defendant's Exhibit No. 30.

using an antibiotic together with a standard dose of a PPI has been used for Helicobacter pylori eradication therapy relating to Indication ❹[19]; P-CABs, which reversibly inhibit the acid pump and thus exhibit a potent gastric acid secretion inhibitory effect, have also been proposed as a treatment capable of replacing PPIs[20]; and it has been widely introduced through clinical guidelines that either a PPI or a P-CAB may be selected and applied.[21]

⑥ According to the approval report[22] for the item approval of the K-CAB Tab. drug, application for item approval was made for Efficacies and Effects ❶ and ❷ on the basis of the results of a Phase 3 clinical trial constituting a confirmatory clinical trial; however, the indication of Efficacy and Effect ❹, added based on the gastric acid secretion inhibitory effect and related diseases, appears to already have been under consideration during the drug development process.

D) Result of the Examination

In light of the statements in the specification of the Patented Invention at Issue and the technical common sense in the technical field concerned, Indications ❶ and ❷ of the Object of Approval at Issue and Indication ❹, for which additional approval was obtained, are substantially identical in "therapeutic effect and use" under the Patent Act. The effect of an extended patent right extends to the practice of the patented invention with respect to the Object of Approval at Issue, and the "use" of that object of approval includes not only Indications ❶ and ❷, for which the initial item approval was obtained, but also the efficacy and effect relating to Indication ❹, for which additional item approval was obtained. Since the use of the challenged object is substantially identical to Efficacy and Effect ❹ of the Object of Approval at Issue, their

19) See Table 60-7 of Defendant's Exhibit No. 7 and the statements in Defendant's Exhibits Nos. 8, 11, 12, and 13.

20) See the statements on pages 17 and 19 of Defendant's Exhibit No. 9.

21) See the statements in Defendant's Exhibits Nos. 10, 13, 14, 15, and 17.

22) See Appendix 3 (contents omitted).

"therapeutic effect and use" are the same.

B. Sub-conclusion

The Object of Approval at Issue and the Challenged Invention have the same active ingredient, tegoprazan, and their therapeutic effect and use are also substantially identical, being the treatment of acid-related diseases through inhibition of gastric acid secretion. The Challenged Invention therefore falls within the scope of rights of the Patented Invention at Issue, the term of which has been extended, and the IPTAB Decision at Issue is not unlawful on any of the grounds asserted by the Plaintiff.

4. Conclusion

The Plaintiff's claim is without merit and is therefore dismissed, and the court renders its decision as set forth in the Order.

Presiding Judge Sungyop WOO
Judge Jiyoung YI
Judge Jiyul AHN

IP HIGH COURT OF KOREA
FOURTH DIVISION
DECISION

Case No.	2024Heo13978 Invalidation of Registration (Design)
Plaintiff	SN Fashion Group Co., Ltd. Representative Director A Counsel for Plaintiff Patent Firm DAE-A (LLC) Patent Attorneys in Charge Yuhyun KIM, Jinju KIM
Defendant	B Counsel for Defendant Patent Firm NAM IP Group (LLC) Patent Attorney in Charge Changhak SHIN
Date of Closing Argument	March 12, 2025
Decision Date	April 10, 2025

ORDER

1. The Plaintiff's claim is dismissed.

2. Litigation costs shall be borne by the Plaintiff.

DEMAND FOR RELIEF

The IPTAB Decision 2023Dang2402, decided June 18, 2024, shall be revoked.

OPINION

1. Basic Facts

A. The Defendant's Registered Design at Issue (Plaintiff's Exhibit No. 2)

1) Registration Number / Filing Date of Application / Registration Date: No. 1194176 / November 15, 2022 / December 2, 2022

2) Name of Article: One-piece dress

3) Description of the Design, Essential Points of the Creative Content of the Design, and Drawings: As set forth in [Appendix 1].

B. The Prior Designs

1) Prior Design 1 (Plaintiff's Exhibit No. 4)

A design for a "one-piece dress" posted on February 14, 2022 on the online shopping mall "GIFTEABOX" (https://gifteabox.com/product/%EB%AC%B4%EB%A3%8C%EB%B0%B0%EC%86%A1-%EB%A0%89%EC%8B%9C-%EC%85%94%EC%B8%A0-%ED%8D%BC%ED%94%84-%EB%B0%B0%EC%83%89-%EB%AF%B8%EB%8B%88-%EC%9B%90%ED%94%BC%EC%8A%A4/6456/), the specific shape of which is as set forth in Paragraph 1 of [Appendix 2].

2) Prior Design 2 (Plaintiff's Exhibit No. 5)

A design for a "blouse" posted on August 19, 2020 on the online shopping mall "Baddiary" (https://baddiary.com/product/%EB%8B%A4%EB%82%98-%ED%8D%BC%ED%94%84-%EB%B8%94%EB%9D%BC%EC%9A%B0%EC%8A%A4/18451/category/42/display/1/), the specific shape of which is as set forth in Paragraph 2 of [Appendix 2].

3) Prior Design 3 (Plaintiff's Exhibit No. 6)

A design for a "blouse" posted on May 22, 2021 on the online shopping mall "ZIGZAG" (https://www.zigzag.kr/catalog/products/105

884774?tab=review), the specific shape of which is as set forth in Paragraph 3 of [Appendix 2].

C. Procedural History of the IPTAB Decision at Issue

On July 14, 2023, the Plaintiff filed a petition for invalidation against the Defendant (Case No. 2023Dang2402), asserting in substance that "the Registered Design at Issue is identical or similar to the Compared Designs[1] and therefore falls under Article 33(1)3 of the Design Protection Act; or, being something that a person having ordinary knowledge in the field to which the design pertains (hereinafter an "ordinary designer") could have easily created by combining or modifying the Compared Designs, it falls under Article 33(2) of the Design Protection Act, and its registration must therefore be invalidated." The Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB"), however, rendered an administrative decision on June 18, 2024 dismissing the Plaintiff's petition (hereinafter "IPTAB Decision at Issue").

[Factual basis] Undisputed facts; the statements and images in Plaintiff's Exhibits Nos. 1 through 6; the overall purport of the pleadings and oral arguments

2. Summary of the Plaintiff's Arguments

The Registered Design at Issue and Prior Design 1 are both forms in which a black tube-top[2] skirt is combined with a white long-sleeved shirt so as to emphasize a cinched waist, and there is no difference in the dominant features of their aesthetic appeal; they are therefore similar as a whole, and the Registered Design at Issue falls under Article 33(1)3 of the Design Protection Act. Even if they were

1) These differ from the Prior Designs in this action.

2) This refers to a cylindrical item of women's clothing whose upper part fits snugly against the body and leaves the shoulders exposed.

dissimilar because of some differences in details such as the voluminous sleeve caps, the form of the gathers, and the cuffs, such differences are no more than common modes of expression and creative techniques that an ordinary designer could have readily achieved by borrowing from and combining Prior Design 2 or 3 with Prior Design 1, so that the Registered Design at Issue falls under Article 33(2) of the Design Protection Act. Accordingly, the design registration of the Registered Design at Issue must be invalidated, and the IPTAB Decision at Issue, which reached a different conclusion, is unlawful and must be revoked.

3. Determination on Whether the IPTAB Decision at Issue Is Unlawful

A. Whether Article 33(1)3 of the Design Protection Act Applies

1) Relevant Legal Principles

In determining the requirements for design registration, similarity in design must be determined not by separating the constituent elements and comparing them individually, but by comparing their overall appearances to assess whether they create different aesthetic impressions on observers. Accordingly, if their dominant features are similar, they must be regarded as similar even if there are some differences in points of detail; and even where some of their constituent elements consist of publicly known shapes, unless such shapes fail to constitute elements evoking a particular aesthetic impression, the judgment must be made according to the decorative aesthetic impression felt upon observing the design as a whole, including such shapes (see Supreme Court Decision 2011Hu2787, decided April 26, 2012, etc.). Meanwhile, with respect to articles such as those that have long been commonly used and are simple, for which a variety of designs have been devised, or whose designs cannot be greatly altered structurally, the scope of similarity of the design must be viewed relatively narrowly (see

Supreme Court Decision 2012Hu3794, decided April 11, 2013, etc.).

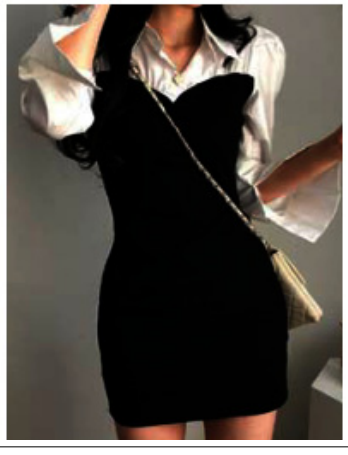
2) Whether the Registered Design at Issue and Prior Design 1 Are Identical or Similar

A) Comparison of the Articles

The Registered Design at Issue and Prior Design 1 are both one-piece dresses and thus correspond to the same article.

B) Comparison of the Designs

A comparison of the overall shape and pattern, and of the shape and pattern of each part, of the Registered Design at Issue and Prior Design 1 is set forth in the following table.

Registered Design at Issue	Prior Design 1
	

Part	Registered Design at Issue	Prior Design 1
① Neckline (front / back)		
		

Part	Registered Design at Issue	Prior Design 1
② Upper chest line of the tube top		
	Registered Design at Issue	Prior Design 1
③ Sleeves (sleeve cap / cuff)		

C) Analysis of Commonalities and Differences

(1) Commonalities

The Registered Design at Issue and Prior Design 1 have in common that ① both take the form of a white long-sleeved shirt (blouse[3]) combined with a tube-top skirt at the upper chest, ② both have a silhouette emphasizing a cinched waistline, and ③ both feature an open collar at the neckline of the white long-sleeved shirt.

(2) Differences

The differences between the Registered Design at Issue and Prior Design 1 are as follows.

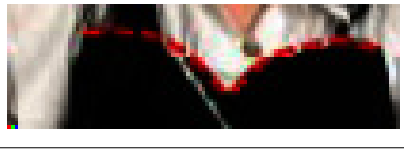
ⓐ **Neckline portion:** In the Registered Design at Issue, the shirt collar is relatively narrow; the front of the collar remains open without buttons down to the portion where it joins the tube-top skirt; and the back of the collar is split on either side of the central

3) The [Description of the Design] of the Registered Design at Issue refers to the above top garment as a "blouse." However, as both "shirt" and "blouse" mean a women's collared top, it is referred to as a "shirt" in this decision.

zipper line at the rear. By contrast, Prior Design 1 differs in that the shirt collar is wider than in the above registered design; the front of the collar descends at the upper chest so that a single button may be fastened and then connects with the tube-top skirt; and the back of the collar continues at the rear without any zipper line or split.

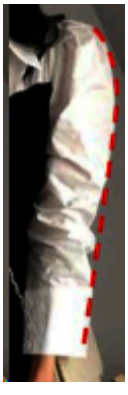
Registered Design at Issue	Prior Design 1
	
	

ⓑ **Upper chest line of the tube top:** In the Registered Design at Issue, the portion where the shirt and the tube-top skirt connect forms a relatively shallow and gentle dip at the center of the chest and then presents a gentle curve close to a straight line up to the left and right armpit portions. By contrast, Prior Design 1 differs in that it forms a shape such as "  ," forming a deep dip at the center of the chest and rising in a relatively steep curve to the left and right, and then descending again in a steep curve at each of the left and right ends, in an arc shape.

Registered Design at Issue	Prior Design 1
	

ⓒ **Sleeve portion:** In the Registered Design at Issue, the central portion of the sleeve cap is folded so as to form a protrusion projecting outward, and gather lines run inward from the protrusion

down to the wrist portion, converging in a "**Y**" shape at the cuff where they are finished by sewing; and the cuff is relatively short, so that it may be fastened with a single button. By contrast, Prior Design 1 differs in that multiple gather lines are formed at the sleeve cap so that the sleeve as a whole forms an outer line in the shape of " **)** " with volume outside the shoulder line, and the multiple gather lines then converge and are finished by sewing; and the cuff is relatively long, so that it may be fastened with three buttons.

Registered Design at Issue	Prior Design 1
	

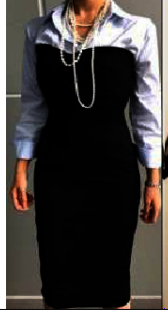
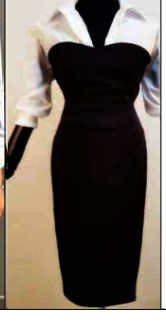
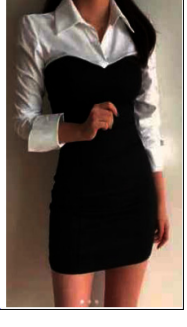
D) Specific Determination

According to the facts found above, together with the following facts and circumstances established by the evidence cited above and the overall purport of the pleadings and oral arguments, when viewed in light of the legal principles discussed above, it is reasonable to find that, notwithstanding the commonalities noted above, the Registered Design at Issue and Prior Design 1 create different aesthetic impressions on observers as a whole by reason of the differences discussed above; the evidence submitted by the Plaintiff alone is insufficient to find that the Registered Design at Issue is similar to Prior Design 1, and there is no other evidence to support such a finding.

(1) Women's one-piece dresses, the articles to which the Registered Design at Issue and Prior Design 1 relate, have been

created in a wide variety of designs since before the filing of the Registered Design at Issue; changes in fashion and to their principal structure are subject to certain limitations; and designs have been created by introducing some variation in points of detail (neckline, sleeves, waistline, gathers), decorative elements (buttons, lace, ribbons, zippers, slits, ruffles, and the like), as well as patterns, silhouette, fit, and so forth, in accordance with changing trends. The scope of similarity of such designs must therefore be viewed narrowly.

(2) As may be seen from the shapes[4] of the publicly known designs in the table below, from the standpoint of ordinary consumers, commonalities ① through ③ between the Registered Design at Issue and Prior Design 1 were already commonly used in women's one-piece dresses before the filing of the Registered Design at Issue.

Posted on the online shopping mall SHEIN on April 19, 2022	Posted on the online shopping mall SHEIN on February 4, 2022	Posted on a Naver blog on August 21, 2017	Posted on a Naver blog on September 5, 2017	Posted on a Naver blog on October 24, 2019
				

In light of the nature and manner of use of the articles concerned, the sensitivity of the consumer group to trends, and other factors, the portions constituting differences ⓐ through ⓒ — such as the specific shape of the neckline, the specific shape of the upper chest line of the tube top, the volume of the sleeve cap and sleeves, and the manner in

4) These are Compared Designs 1 and 2 of the IPTAB Decision at Issue and Prior Designs 1 through 3 (see Plaintiff's Exhibit No. 3).

which the lower sleeves are finished — are portions that ordinary consumers purchasing one-piece and two-piece dresses observe frequently not only when examining but also when wearing them, and that readily draw the observer's eye and attention; it is therefore reasonable to regard them as constituting the "essential parts."

(3) By reason of differences ⓐ through ⓒ noted above, the Registered Design at Issue, when compared as a whole with Prior Design 1, forms a distinctive aesthetic appeal and causes the observer to feel a different aesthetic impression as a whole; it therefore cannot be regarded as identical or similar to Prior Design 1.

B. Whether Article 33(2) of the Design Protection Act Applies

1) Relevant Legal Principles

Article 33(2) of the Design Protection Act provides that a design may not be registered if an ordinary designer could easily create it by combining designs falling under subparagraph 1 or 2 of paragraph (1) of the same Article (hereinafter "publicly known designs"), or on the basis of shapes, patterns, or colors, or combinations thereof, that are widely known in or outside the Republic of Korea. The purport of that provision is that designs of a low level of creativity may not be registered as designs, since an ordinary designer could easily create them — such as designs that almost entirely imitate or appropriate the shapes, patterns, or colors, or combinations thereof, of publicly known designs (hereinafter "publicly known forms") or shapes, patterns, or colors, or combinations thereof, widely known in or outside the Republic of Korea (hereinafter "well-known forms"); designs that, even where such forms have been partially modified, amount as a whole to no more than commercial or functional modifications that possess no distinct aesthetic value; or designs that have merely been altered, combined, or appropriated by creative methods or expressive techniques common in the design field concerned. Moreover, a design may also constitute a design of a low level of creativity where

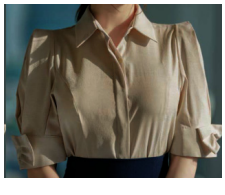
publicly known forms or well-known forms have been combined with one another, or where such a combined form has been modified, altered, or appropriated as described above; and in determining that level of creativity, it must also be examined whether an ordinary designer could easily arrive at such a combination, in light of the articles to which the publicly known designs relate or the fields in which the well-known forms are known, the relatedness of the external features of those publicly known designs or well-known forms, general trends in the design field concerned, and other factors (see Supreme Court Decision 2013Hu2613, decided March 10, 2016, etc.).

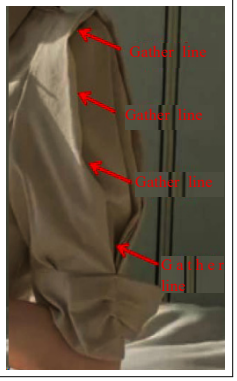
2) Whether the Registered Design at Issue Could Have Been Easily Created by Combining Prior Design 1 with Prior Design 2 or 3

Since differences ⓐ through ⓒ exist between the Registered Design at Issue and Prior Design 1, this court examines whether an ordinary designer could have easily created the Registered Design at Issue by altering and combining Prior Design 2 or 3 with Prior Design 1.

A) Summary of the Plaintiff's Arguments

The Plaintiff asserts in substance that difference ⓒ between the Registered Design at Issue and Prior Design 1 could have been easily overcome by altering and combining the sleeve portion of Prior Design 1 with the sleeve portion of Prior Design 2 or 3.

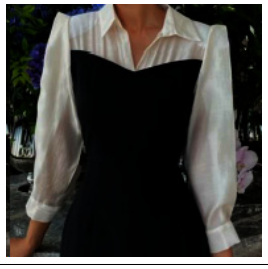
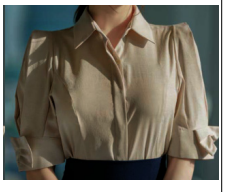
Part	Registered Design at Issue	Prior Design 2	Prior Design 3
Top overall			

Part	Registered Design at Issue	Prior Design 2	Prior Design 3
Sleeves			

B) Examination

(1) As to Difference ⓒ

The Registered Design at Issue and Prior Designs 2 and 3 all form a protrusion at the sleeve cap, and in Prior Design 2 the gathers converge to a single point at the cuff where they are finished by sewing (in the case of Prior Design 3, a ribbon-shaped ruffle decoration is added at the cuff). However, in the Registered Design at Issue, a sleeve protrusion is formed and the outer line of the sleeve is formed straight down to the cuff, so that the gathers inside the protrusion also overlap in a straight line along the length of the outer side of the sleeve, and when viewed from the front the inner gathers are relatively little exposed beyond the outer line; whereas in Prior Designs 2 and 3, a sleeve protrusion is formed and the central portion of the gathers formed inside the protrusion bulges in a ") " shape, and the curving form of the gather lines is exposed beyond the outer line (in the Registered Design at Issue, when worn and viewed from the front, the gathers formed inside the protrusion are concealed and structured so as not to be readily visible, and such a difference in silhouette appears to be further accentuated when the garment is worn).

	Registered Design at Issue[5]	Prior Design 2	Prior Design 3
Worn by a Model			

In this respect, it appears that even altering and combining the sleeves of Prior Design 1 with the sleeves of Prior Designs 2 and 3 could not have produced the distinctive aesthetic impression of the Registered Design at Issue. Moreover, such a difference does not appear to be easily creatable merely by extending the length of the sleeves, and would appear to require comprehensive consideration of the number and spacing of the gathers and the manner of folding them; it is therefore difficult to regard the level of creativity as low. Accordingly, difference ⓒ between the Registered Design at Issue and Prior Design 1 is likewise not easily overcome.

(2) As to Differences ⓐ and ⓑ

Between the Registered Design at Issue and Prior Design 1 there exists difference ⓐ in the shirt collar portion of the neckline, and there also exists difference ⓑ in the upper chest line of the tube top. The Plaintiff has neither made any particular argument nor proved that difference ⓐ could have been easily created by altering and combining Prior Design 2 or 3, and Prior Designs 2 and 3 have no structure corresponding to the upper chest line of a tube top. Accordingly, it does not appear that differences ⓐ and ⓑ could have been easily created even by combining Prior Design 2 or 3 with Prior Design 1.

5) See Defendant's Exhibit No. 3, a video of a model wearing the Registered Design at Issue.

(3) Determination on the Plaintiff's Remaining Arguments

The Plaintiff also asserts in substance that modifying the wave of the upper chest line of the tube top of Prior Design 1, or modifying the shirt collar or the presence or absence of buttons, likewise amounts to no more than a common creative method or commercial modification, so that all of differences ⓐ through ⓒ between the Registered Design at Issue and Prior Design 1 could have been easily created by further altering and combining the sleeve portion of a shirt such as that of Prior Design 2 or 3 with Prior Design 1 as so modified. However, it is difficult to regard the process of partially modifying Prior Design 1 and then selectively taking, modifying, and combining part of Prior Design 2 or 3 as a common creative method that an ordinary designer could have readily employed; and considering also that, as discussed above, difference ⓒ could not have been easily created even by altering and combining Prior Design 2 or 3 with Prior Design 1, it cannot be regarded as easy for an ordinary designer to create the Registered Design at Issue by partially modifying Prior Design 1 and then partially altering and combining Prior Design 2 or 3.

C. Sub-conclusion

It is difficult to find that the Registered Design at Issue falls under Article 33(1)3 or Article 33(2) of the Design Protection Act; accordingly, the IPTAB Decision at Issue, which reached the same conclusion, is free from the grounds of illegality asserted by the Plaintiff.

4. Conclusion

The Plaintiff's claim seeking revocation of the IPTAB Decision at Issue is without merit and is therefore dismissed, and the court renders its decision as set forth in the Order.

Presiding	Judge	Sungyop WOO
	Judge	Jiyoung YI
	Judge	Hyunhwa LIM

[Appendix 1]

Registered Design at Issue

[Article to Which the Design Is Applied] One-piece dress

[Description of the Design]

1. The materials are synthetic resin and synthetic fiber.
2. The design of this application is worn mainly by women.
3. The design of this application gives the impression of a see-through blouse (upper portion) layered over a tube-top style one-piece dress (lower portion); it brings out a refined and urban mood while providing a close, gapless fit by means of a heart-shaped wave at the chest line, and, since the one-piece dress (chest portion) forms a princess line, it provides a figure-shaping effect without the need for a corset.
4. Drawing 1.1 is a photograph substitute for a drawing showing the overall form of the design of this application.
5. Drawing 1.2 is a photograph substitute for a drawing showing the front portion of the design of this application.
6. Drawing 1.3 is a photograph substitute for a drawing showing the rear portion of the design of this application.
7. Drawing 1.4 is a photograph substitute for a drawing showing the left side portion of the design of this application.
8. Drawing 1.5 is a photograph substitute for a drawing showing the right side portion of the design of this application.
9. Drawing 1.6 is a photograph substitute for a drawing showing the top portion of the design of this application.
10. Drawing 1.7 is a photograph substitute for a drawing showing the bottom portion of the design of this application.

[Essential Points of the Creative Content of the Design]

The essential point of the creative content of the design of this application is the combination of the shape and pattern of a "one-piece dress."

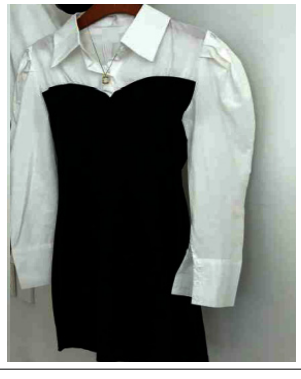
Drawing 1.1	Drawing 1.2	
		
Drawing 1.3	Drawing 1.4	Drawing 1.5
		
Drawing 1.6	Drawing 1.7	
		

End.

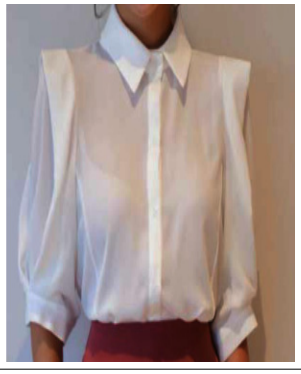
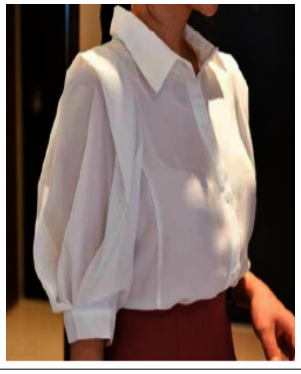
[Appendix 2]

Prior Designs

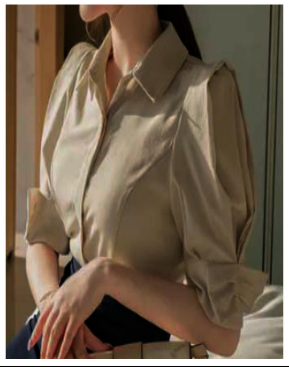
1. Prior Design 1

Drawing 1	Drawing 2
	
Drawing 3	Drawing 4
	

2. Prior Design 2

Drawing 1	Drawing 2
	

3. Prior Design 3

Drawing 1	Drawing 2
	

End.

IP HIGH COURT OF KOREA
FIFTH DIVISION
DECISION

Case No.	2024Heo16021 Rejection (Design)
Plaintiff	A Counsel for Plaintiff Patent Attorney Junyeon GIL
Defendant	Commissioner of the Korean Intellectual Property Office Litigation Performer Yulgeon SHIN
Date of Closing Argument	June 24, 2025
Decision Date	July 24, 2025

ORDER

1. The IPTAB Decision 2024Won551, decided October 23, 2024, shall be revoked.

2. Litigation costs shall be borne by the Defendant.

DEMAND FOR RELIEF

The same as the Order.

OPINION

1. Basic Facts

A. The Applied Design at Issue

1) Filing Date of Application / Application Number: October 27, 2022 / No. 30-2022-43827

2) Article to Which the Design Is Applied: Golf ball

3) Description of the Design, Drawings, etc.: As set forth in [Appendix 1].

B. Prior Designs[1)]

1) Prior Design 1-1

A design for a "kickball" appearing in a photograph included in a posting made public before April 13, 2023 on the online shopping site B, the specific shape of which is as set forth in Paragraph "A." of [Appendix 2].[2)]

2) Prior Design 1-2

A design for a "kickball" appearing in a photograph included in a posting made public before April 24, 2025 on the online shopping site Amazon, the specific shape of which is as set forth in Paragraph "B." of [Appendix 2].[3)]

---

1) The Defendant refers to Prior Design 1-1 and Prior Design 1-2 together as one and the same prior design; however, since Prior Design 1-1 and Prior Design 1-2 relate to different photographs, they are identified separately here.

2) Source: https://www.amazon.sg/Sportime-Inflatable-Four-Square-Ball/dp/B00J0K3954 (hereinafter the "first URL," Plaintiff's Exhibit No. 3).

3) Source: https://www.amazon.ae/SportimeMax-Four-Square-Inches-Multi-Color/dp/B0042SR9O6 (hereinafter the "second URL," Defendant's Exhibit No. 1).

C. Procedural History of the IPTAB Decision at Issue

1) With respect to the Applied Design at Issue, an examiner of the Korean Intellectual Property Office (hereinafter "KIPO") issued a notice of office action on July 17, 2023, on the grounds, among others, that "the Applied Design at Issue could easily have been created from Prior Design 1-1, which was publicly known before its filing."

2) Although the Plaintiff submitted a written opinion and an amendment on September 18, 2023, the KIPO examiner refused the registration of the Applied Design at Issue on November 27, 2023, on the ground that "the ground for rejection that the Applied Design at Issue could easily have been created from Prior Design 1-1 has not been resolved." The Plaintiff thereupon filed with the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB"), on March 6, 2024, an appeal from the above rejection (hereinafter "Appeal at Issue").

3) The IPTAB examined the matter as Case No. 2024Won551 and, on October 23, 2024, rendered an administrative decision dismissing the Appeal at Issue (hereinafter "IPTAB Decision at Issue") on the ground that "the Applied Design at Issue is a design that could easily be created from Prior Design 1-1 and thus falls under Article 33(2) of the Design Protection Act."

[Factual basis] Undisputed facts; the statements or images in Plaintiff's Exhibits Nos. 1 through 4 and 6 and in Defendant's Exhibit No. 1; the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

The registration of the Applied Design at Issue should not be

refused, for the following reasons. The IPTAB Decision at Issue, which reached a different conclusion, is therefore unlawful.

1) Prior Design 1-2 is a design separate and distinct from Prior Design 1-1 and cannot constitute a ground for refusing registration of the Applied Design at Issue. Furthermore, it cannot be concluded that Prior Design 1-1 and Prior Design 1-2 (hereinafter "Prior Designs Asserted by the Defendant") were designs publicly known before the filing date of the Applied Design at Issue, and they therefore do not qualify as prior designs.

2) Even if found otherwise, the Applied Design at Issue, which relates to a golf ball, is distinguishable from the Prior Designs Asserted by the Defendant, which relate to a kickball, and evokes a distinctive aesthetic impression due to features such as the straight line formed where the four divided surfaces meet, so that it constitutes a design that could not easily be created from the above prior designs.

B. The Defendant

The Prior Designs Asserted by the Defendant were publicly known before the filing date of the Applied Design at Issue and thus qualify as prior designs, and the Applied Design at Issue is a design that could easily be created from those prior designs. The IPTAB Decision at Issue, which reached the same conclusion, is therefore lawful.

3. Whether the IPTAB Decision at Issue Is Unlawful

A. Qualification as Prior Designs

According to the facts found above and the following facts and circumstances, which may be established by the evidence cited above and the overall purport of the pleadings and oral arguments, the evidence submitted by the Defendant alone is insufficient to find that

the Prior Designs Asserted by the Defendant were publicly known before the filing date of the Applied Design at Issue, and there is no other evidence to support such a finding. Accordingly, without further consideration of whether the above prior designs are substantially identical, the above prior designs cannot be regarded as prior designs capable of serving as a basis for determining ease of creation under Article 33(2) of the Design Protection Act.

1) In the IPTAB Decision at Issue, the IPTAB determined that "Prior Design 1-1 was posted on the internet site B on March 14, 2014 and thus constitutes a design publicly known before October 27, 2022, the filing date of the Applied Design at Issue." This was because the lower right portion of Paragraph A. of [Appendix 2] bore the entry "Date First Available 14 March 2014" (hereinafter "Entry ① at Issue").

2) The notice of office action issued by the KIPO examiner on July 17, 2023 stated the first URL as the source of Prior Design 1-1. When Prior Design 1-1 could not be found in a search during these proceedings, the Defendant asserted that Prior Design 1-2, which is found at the second URL, is identical to Prior Design 1-1, submitted Defendant's Exhibit No. 1, and asserted that the date of first public disclosure is confirmed as "May 26, 2013" (page 10 of the brief dated June 23, 2025). This was because the lower right portion of Paragraph B. of [Appendix 2] bore the entry "Date First Available 26 May 2013" (hereinafter "Entry ② at Issue"; together with Entry ① at Issue, the "Entries at Issue").

3) However, the Entries at Issue alone make it difficult to find that the Prior Designs Asserted by the Defendant were publicly known on March 14, 2014 or May 26, 2013. The specific reasons are as follows.

A) In order to find, on the basis of the entry "Date First Available," that the Prior Designs Asserted by the Defendant were

publicly known on that date, it must be established that ① a photograph of the same article offered for sale was posted online on the Date First Available and was not thereafter changed, and ② the Date First Available itself is not changed.

B) In these proceedings the Defendant submitted Prior Design 1-2, a photograph different from Prior Design 1-1, and the two do not have the same photograph of the article offered for sale or the same Date First Available. Furthermore, the actual search results for the first URL appear to differ depending on the particular time at which the search is conducted[4]; in light of this, it is determined that a person with administrator access to a particular URL on site B may change the photograph or the Date First Available on the URL where the article offered for sale is presented. Accordingly, it cannot be concluded—on the premise that a design identical to the one shown in results of a search conducted at a different time would also have been searchable online on the date specified as the Date First Available—that the design perceivable at the time of the actual search would likewise have been searchable on the Date First Available in a manner that allowed an unspecified number of persons to perceive its content.

C) Even though the Plaintiff raised no particular objection, before these proceedings, as to the time of public disclosure of the prior designs based on the Entries at Issue, so long as the Plaintiff contests the qualification of the prior designs in these proceedings by raising the possibility that the photographs and the like were changed after the Date First Available, that circumstance alone does not permit a finding, on the basis of the Entries at Issue, that Prior Designs 1-1

4) According to the reference brief dated July 10, 2025 and other materials submitted by the Plaintiff, a search of the first URL on June 24, 2025 returned not the “photograph of the ball alone” as set forth in [Appendix 1] to the notice of office action dated November 27, 2023, but the “photograph of a boy holding a ball” as set forth in [Appendix 2] thereto, and the Date First Available appears to be stated as March 14, 2014 rather than May 26, 2013.

and 1-2 were publicly known before the filing date of the Applied Design at Issue.

B. Sub-conclusion

Accordingly, without need for further consideration, the Applied Design at Issue cannot be regarded as falling under Article 33(2) of the Design Protection Act. The IPTAB Decision at Issue, which reached a different conclusion, is unlawful and must be revoked.

4. Conclusion

Accordingly, the Plaintiff's claim in this case is well-founded and is therefore granted, and the court renders its decision as set forth in the Order.

Presiding Judge Jaeryung KIM
Judge Kisu KIM
Judge Joung Woon YUN

[Appendix 1]

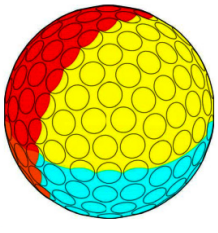
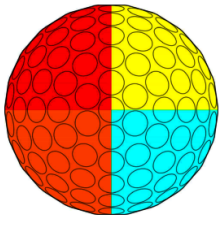
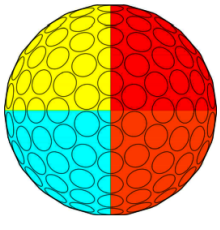
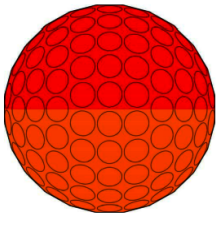
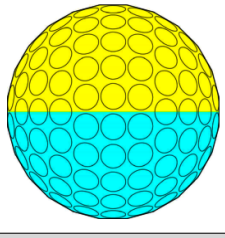
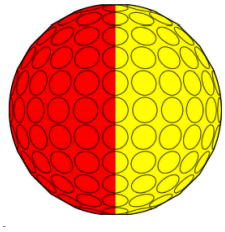
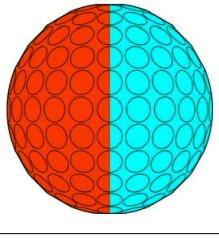
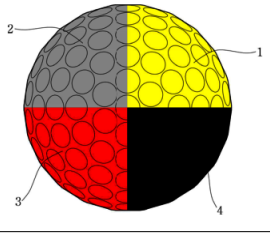
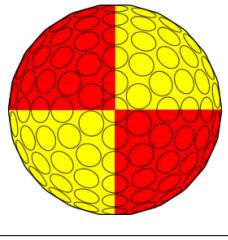
Description of the Applied Design at Issue, Drawings, etc.

[Description of the Design]

1. The material is synthetic resin.
2. Drawing 1.1 is a drawing representing the overall form of the design; Drawing 1.2 is a drawing representing the front of the design; Drawing 1.3 the rear; Drawing 1.4 the left side; Drawing 1.5 the right side; Drawing 1.6 the top; and Drawing 1.7 the bottom of the design.
3. In the design of this application, the golf ball surface is divided into partitioned sections, and the configuration in which the partitioned sections are divided is such that adjoining sections are each formed in a different color (including colorless), so that they are perceived as partitioned sections.
4. In the design of this application, four partitioned sections are formed.
5. Reference Drawing 1.1 is a drawing showing that, in the design of this application, the partitioned sections of the golf ball are formed by four sections (1, 2, 3, 4) each formed in a different color.
6. Reference Drawing 1.2 is a drawing showing that, in the design of this application and unlike Reference Drawing 1.1, adjoining partitioned sections are formed in colors different from one another (sections that do not adjoin may be formed in the same color), so that the four partitioned sections of the golf ball may be formed.

[Essential Points of the Creative Content of the Design]

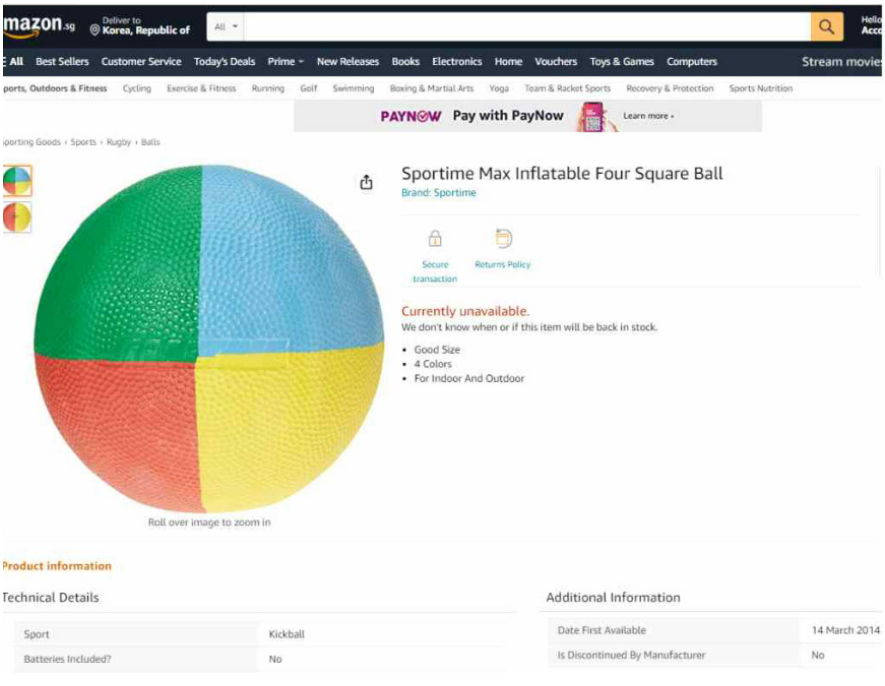
In the design of this application, the divided and adjoining sections of the golf ball surface are formed in different colors so as to be distinguished, with the result that the divided surfaces are formed as partitioned sections perceived as being in different colors; the essential point of the creative content is that this produces a sense of unexpectedness and a sense of stability in the external appearance of the golf ball, thereby creating a distinctive aesthetic impression in the golf ball.

Drawing 1.1	Drawing 1.2	Drawing 1.3
		
Drawing 1.4	Drawing 1.5	Drawing 1.6
		
Drawing 1.7	Reference Drawing 1.1	Reference Drawing 1.2
		

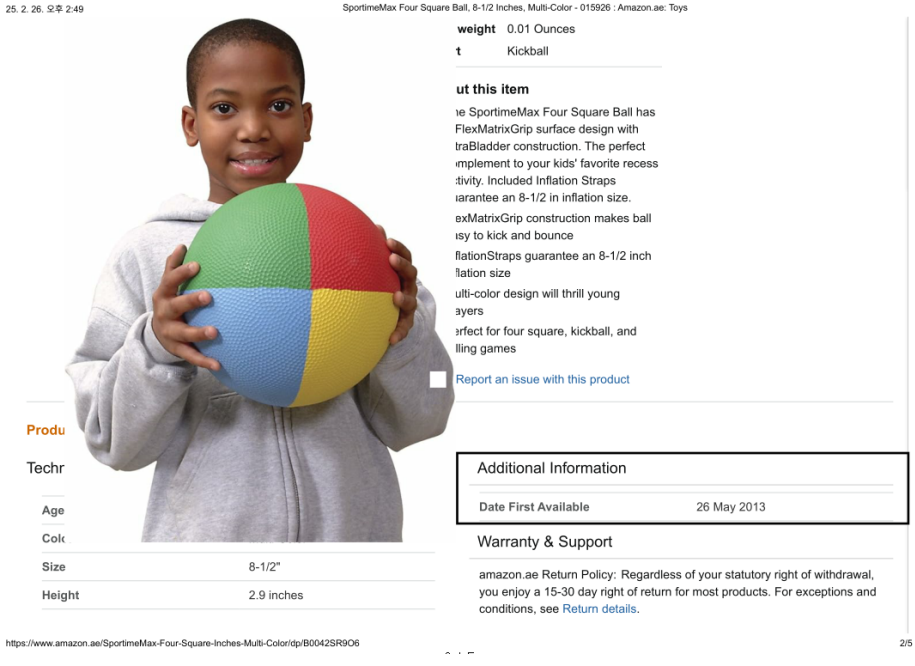
[Appendix 2]

Prior Designs

A. Prior Design 1-1



B. Prior Design 1-2



End.

IP HIGH COURT OF KOREA
FIRST DIVISION
DECISION

Case No.	2025Heo10296 Rejection (Trademark)
Plaintiff	A
Defendant	Minister of Intellectual Property Litigation Performer Jaeseong NOH
Date of Closing Argument	September 25, 2025
Decision Date	October 30, 2025

ORDER

1. The Plaintiff's claim is dismissed.

2. Litigation costs shall be borne by the Plaintiff.

DEMAND FOR RELIEF

The IPTAB Decision 2023Won1977, decided February 4, 2025, shall be revoked.

OPINION

1. Basic Facts

A. The Applied Trademark at Issue (Plaintiff's Exhibit No. 18)

1) Filing Date of Application / Application Number: August 24, 2020 / No. 40-2020-0148341

2) Composition: COCINA 코시나

3) Designated Goods: Water-saving showers, water-purifying showers, push-button shower heads, shower heads, filters for shower heads, showers, sprayers for showers, faucet fittings for washbasins, water-pressure-boosting showers, water-pressure-regulating shower heads, water-softening showers, overhead showers, and portable shower heads, in Class 11 of the classification of goods

B. The Prior Used Trademarks

1) Prior Used Trademark 1

A) Composition: Kocina 코시나

B) Used on: Showers, shower heads, bath mats, household electric foot baths, rugs, kitchen utensils and containers, furniture, and the like

C) Period of Use: From 2016 to the date of the closing of argument

2) Prior Used Trademark 2

A) Composition: 코시나

B) Used on: Showers, shower heads, bath mats, household electric foot baths, rugs, kitchen utensils and containers, furniture, and the like

C) Period of Use: From 2016 to the date of the closing of argument

3) Prior Used Trademark 3

A) Composition: 

B) Used on: Showers, shower heads, bath mats, household electric foot baths, rugs, kitchen utensils and containers, furniture, and the like

C) Period of Use: From 2016 to the date of the closing of argument

C. Procedural History of the IPTAB Decision at Issue

1) The Plaintiff filed an application for the Applied Trademark at Issue on August 24, 2020, in response to which an examiner of the Korean Intellectual Property Office (hereinafter the "KIPO") issued a notice of office action to the Plaintiff on March 22, 2021, on the ground that "the Applied Trademark at Issue falls under Article 34(1)7 and Article 35(1) of the Trademark Act." Although the Plaintiff submitted a written opinion and an amendment, the KIPO examiner rejected the application for the Applied Trademark at Issue on July 1, 2021, on the ground that "the Applied Trademark at Issue falls under Article 34(1)7." The Plaintiff thereupon filed on July 27, 2021 an appeal from the above rejection with the Intellectual Property Trial and Appeal Board (Case No. 2021Won1943); on October 14, 2021, the Intellectual Property Trial and Appeal Board (hereinafter the "IPTAB") rendered an administrative decision granting the Plaintiff's appeal on the ground that "the Applied Trademark at Issue does not fall under Article 34(1)7 of the Trademark Act."

2) On October 18, 2021, an examiner of the KIPO published the application for the Applied Trademark at Issue; however, on December

14, 2021, Barowa Co., Ltd. (hereinafter "Non-Party Company") filed an opposition to trademark registration, asserting in substance that the Applied Trademark at Issue falls under the ground under Article 34(1)13 of the Trademark Act. On August 18, 2023, the KIPO examiner rejected the application for the Applied Trademark at Issue on the ground that "the Applied Trademark at Issue is a trademark identical or similar to another person's Prior Used Trademarks, which are recognized among domestic consumers as indicating the goods of a particular person, and its application was filed for the unjust purpose of free-riding on the good-quality image accumulated in the Prior Used Trademarks; it therefore falls under Article 34(1)13 of the Trademark Act."

3) The Plaintiff thereupon filed on September 15, 2023 a petition for trial with the IPTAB (Case No. 2023Won1977) seeking revocation of the above rejection; on February 4, 2025, the IPTAB rendered an administrative decision dismissing the Plaintiff's petition (hereinafter "IPTAB Decision at Issue") on the ground that "the Applied Trademark at Issue falls under Article 34(1)13 of the Trademark Act."

[Factual basis] Undisputed facts; the statements and images in Plaintiff's Exhibits Nos. 1, 3, 5, 6, 18, 19, 20, and 30 (including all branch numbers where such numbers exist; the same applies hereinafter); the overall purport of the pleadings and oral arguments

2. Summary of the Parties' Arguments

A. The Plaintiff

The Applied Trademark at Issue does not fall under Article 34(1)13 of the Trademark Act, for the following reasons.

1) The Non-Party Company used the Prior Used Trademarks for only approximately eight months and interchangeably with trade names or trademarks such as "Barowa" and "Baram Pokpung," and the

Non-Party Company's sales, advertising expenditures, and the like were either unproven or markedly small; the Prior Used Trademarks therefore cannot be said to have been trademarks recognized among domestic consumers as those of a particular person at the time when the Applied Trademark at Issue was filed.

2) The Plaintiff created the Applied Trademark at Issue upon happening to encounter the Spanish language, and came to use it on "showers" because a younger brother of her husband's father ran a manufacturing factory for "showers, water-supply fittings," and the like; and none of the trademark applications previously filed by the Plaintiff have been found to constitute a trademark application made for an unjust purpose. It therefore cannot be found that the Plaintiff applied for the Applied Trademark at Issue for the purpose of obtaining an unfair benefit by free-riding on the goodwill and reputation of the Prior Used Trademarks.

B. The Defendant

The Prior Used Trademarks were already recognized among domestic consumers as trademarks of a particular person before the application for the Applied Trademark at Issue, and the application for the Applied Trademark at Issue was filed for the purpose of obtaining an unfair benefit by free-riding on the goodwill and reputation of the Prior Used Trademarks; it therefore falls under Article 34(1)13 of the Trademark Act.

3. Whether the IPTAB Decision at Issue Is Unlawful

A. The Issue in This Case

It is undisputed between the parties that the mark of the Applied Trademark at Issue, "COCINA 코시나 ," and the respective marks of the

Prior Used Trademarks, “

,” “

,” and “

,” are identical or similar (indeed, comparing the above marks, the Applied Trademark at Issue and the Prior Used Trademarks would all be called “코시나” (Ko-si-na) so that even if there are some differences in their appearance, it is reasonable to find the two sets of marks identical or similar).

The issues in this case are therefore whether the Prior Used Trademarks were recognized by domestic consumers as trademarks of a particular person, and whether the Plaintiff filed the Applied Trademark at Issue for an unjust purpose.

B. Relevant Legal Principles

For a registered trademark to fall under Article 34(1)13 of the Trademark Act, the prior used trademark compared with the registered trademark must, at the time of application, have been recognized by consumers in Korea or abroad as indicating the goods of a particular person, and the applicant for the registered trademark must have used a trademark identical or similar to the prior used trademark with an unjust purpose. Whether a prior used trademark is recognized among consumers in Korea or abroad as the trademark of a particular person must be determined on the basis of the period, manner, mode, and scope of use of that trademark, and whether it has become known to an objectively considerable degree in light of the actual state of trade or generally accepted social norms (see Supreme Court Decision 2017Hu752, decided August 14, 2019, and Supreme Court Decision 2011Hu3896, decided May 9, 2013, etc.).

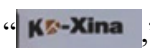
In determining whether a trademark applicant had an unjust purpose provided in Article 34(1)13 of the Trademark Act, comprehensive consideration must be given to: the degree of recognition or creativity of the particular person’s trademark; the degree of identity or similarity

between the particular person's trademark and the applicant's trademark; whether there were negotiations between the applicant and the particular person concerning the trademark and the content of those negotiations; other relationships between the two parties; whether the applicant made concrete preparations for a business that would use the applied trademark; the identity or similarity of the goods or the existence of an economic connection between them; the actual state of trade; and other factors (see Supreme Court Decision 2013Hu1986, decided January 23, 2014, etc.).

C. Whether the Prior Used Trademarks Were Recognized as Trademarks by Domestic Consumers

In light of the following circumstances or facts, which may be found from the evidence cited above, the statements and images in Defendant's Exhibits Nos. 1, 3, 5, 6, 7, 8, 9, 11, 15 through 21, 23 through 29, and 35 through 40, and the overall purport of the pleadings and oral arguments, it is reasonable to find that the Prior Used Trademarks were recognized among domestic consumers as trademarks of a particular person at the time the application for the Applied Trademark at Issue was filed.

1) The Non-Party Company commenced its business on January 16, 2014, and its business type is stated as "wholesale and retail, manufacturing" and its business item as "electronic commerce (household goods)," among others.

2) Starting in 2016, the Non-Party Company has sold goods on the online marketplace "Coupang" using marks such as "코시나," "," and "" in the names and packaging of the goods. Among these, the numbers of product reviews for "Koxina Baram Pokpung Jumbo Shower," "Koxina Mega Water Pressure Triple Water-Purifying Shower," "Koxina Water-Saving Shower," and "Koxina Mega Water Pressure Powerful Shower" are 15,347, 1,282, 3,177, and

6,306, respectively.

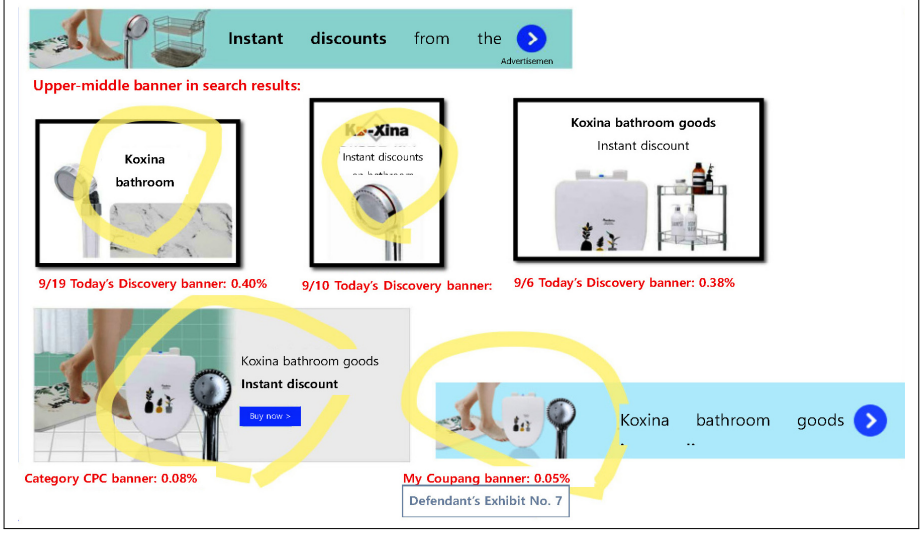
Defendant's Exhibit No. 3	Defendant's Exhibit No. 11
Koxina **Koxina Baram Pokpung Jumbo Shower, mixed colors, 1 unit** 15,347 product reviews	Koxina **Koxina Mega Water Pressure Triple Water-Purifying Shower + 6 filters** 1,282 product reviews
Defendant's Exhibit No. 21	Defendant's Exhibit No. 26
Koxina Water-Saving Shower + 2m hose set, 1 3,177 product reviews Koxina Mega Water Pressure Powerful Shower + 2m shower hose, 1 unit KRW 9,400 Rocket Deliverv (6,306)	 Koxina Mini Sprayer + 3m metal shower COUPANG coupa.ng

3) From 2016 to 2018, the Non-Party Company continuously sent official letters by e-mail to Coupang Corp. requesting a promotion event under the name "Koxina Bathroom Goods Collection," or requesting a special discount event for the goods covered by that promotion (Defendant's Exhibits Nos. 35 through 40); and on March 15, 2019, a post was published on a Naver blog stating that the "Koxina Bathroom Goods Fair" would run from February 11, 2019 to March 31, 2019 (Defendant's Exhibit No. 29-1). In light of this, the Non-Party Company appears to have consistently conducted advertising and discount events for the goods on which the Prior Used Trademarks were used, from 2016 onward.

4) On June 14, 2019, the Non-Party Company entered into an annual advertising contract with Coupang Corp. for total advertising expenses of KRW 240,000,000 (Defendant's Exhibit No. 5), and on October 4, 2019 Coupang Corp. shared by e-mail the September 2019 advertising analysis report with E, the representative of the Non-Party Company (Defendant's Exhibit No. 6). The advertised goods in the September 2019 advertising analysis report (Defendant's Exhibit No. 7) included shower products bearing marks such as "코시나" and "Ko-Xina"

(these, together with "코시나," "Ko-Xina," and "KOXINA," are all referred to as the "Actually Used Marks" hereinafter).

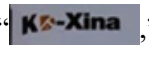
Defendant's Exhibit No. 7



5) Numerous purchase reviews for the Non-Party Company's goods were posted on Naver blogs from February 11, 2017 to around May 2020.

Defendant's Exhibit No. 8	Defendant's Exhibit No. 15
Sindongmam Sindongi Friendly Sindong Mother-and-Daughter's Multilingual Stories♡ | Influencer | January 24, 2020 **Barowa** Koxina Double-Filter Shower is the Real Deal I ordered from **Barowa** Koxina the Time Bag Double-Filter Shower, which a father is said to have made for his child. With the father's heart... So that your family can shower with clean water, come see it at **Barowa** Koxina. That strange smell from the water every time I brushed my teeth... #Barowa #Koxina #filtershower #shower #doublefiltershower #BarowaKoxina	Hello, this is Bling Bling The shower head at home broke, so after looking at this and that and thinking it over a lot, I ended up buying a Koxina shower.
Defendant's Exhibit No. 17	**Defendant's Exhibit No. 19**
So here is the Koxina Barowa shower head I am currently using Rocket Delivery zoom zoom  	My shower head broke all of a sudden. The one I had been using was not that old either, but one side of the head just burst. So, in a pinch, I bought a Koxina shower head because it looked okay.

Defendant's Exhibit No. 20	Defendant's Exhibit No. 29-2
	
Defendant's Exhibit No. 29-5	
	

6) Compared with the marks of the Prior Used Trademarks, "코시나," "," and "," the Non-Party Company's Actually Used Marks "," "," "코시나," and "" are very similar in appearance, the only differences being that they are somewhat stylized or that some letters of the English alphabet differ, and both are called "코시나" (Ko-si-na). Accordingly, the aforementioned records of the Non-Party Company's advertising to consumers using the Actually Used Marks should rightly be taken into account in assessing the recognition of the Prior Used Trademarks.

7) Determination on the Plaintiff's Arguments

A) The Plaintiff asserts that ① the Non-Party Company's use of the Prior Used Trademarks from 2016 to December 2, 2019 constitutes infringement of the trademark rights in another person's registered trademark "" or "," or an act of unfair competition falling under Article 2(1)(h) of the Unfair Competition Prevention and Trade Secret Protection Act; ② the Non-Party Company's sale of goods under the name "Koxina Baram

Pokpung Jumbo Shower" constitutes infringement of the trademark rights in another person's registered trademark "바람폭풍" (Baram Pokpung); and ③ the Non-Party Company's act of sending the Plaintiff, on November 14, 2020, a content-certified letter indicating Prior Used Trademark 1 as a registered trademark and requesting cessation of trademark infringement constitutes a violation of Article 224(1) of the Trademark Act (prohibition of false marking). The Plaintiff therefore asserts that the Non-Party Company has no prior user right under Article 99(1)1 of the Trademark Act with respect to the Prior Used Trademarks and cannot be regarded as having lawfully used them; that the period of use of the Prior Used Trademarks must accordingly be calculated at the earliest from December 3, 2019, when the Non-Party Company was assigned the trademark rights in "Kocina 코시나"; and that it cannot assert a prior user right against the Plaintiff.

However, in determining whether a trademark cannot be registered under Article 34(1)13 of the Trademark Act because a prior used trademark was used before the trademark application and has thereby come to be recognized by consumers in Korea or abroad as indicating the goods of a particular person, the grounds asserted by the Plaintiff are not factors to be considered. Accordingly, even if the circumstances asserted by the Plaintiff exist, the Plaintiff's assertion in this part is without merit, without need for further determination.

B) The Plaintiff asserts that, since the Prior Used Trademarks were not used on the designated goods as registered trademarks, the Non-Party Company's use of the Prior Used Trademarks on "showers, shower heads," and the like cannot be asserted as prior use.

However, Article 34(1)13 of the Trademark Act applies where a prior used trademark has come, through use, to be recognized among consumers in Korea or abroad as the trademark of a particular person, irrespective of whether the prior used trademark is registered. The Plaintiff's assertion in this part is therefore also without merit.

C) The Plaintiff asserts that, since the Non-Party Company used the Prior Used Trademarks interchangeably with the trade name "Barowa" or the trademark "바람폭풍" (Baram Pokpung), it is difficult to find that the Prior Used Trademarks were used as trademarks; that among the Actually Used Marks, "" is a modified mark not recognized as identical to the marks of the Prior Used Trademarks; and that the product "Koxina Baram Pokpung Jumbo Shower" was sold under the name "Barowa Baram Pokpung Jumbo Shower" until around 2019. Taking these together, the Plaintiff asserts that the Prior Used Trademarks cannot be regarded as having been recognized by domestic consumers as trademarks of a particular person.

In response, the Defendant admits that, while the product "Koxina Baram Pokpung Jumbo Shower" was sold on the online marketplace "Coupang," some units were also sold under the product name "Barowa Baram Pokpung Jumbo Shower" (Defendant's Brief dated September 17, 2025). However, as discussed above, the Non-Party Company primarily used the Prior Used Trademarks as standalone marks in selling its goods; according to the statements in Defendant's Exhibits Nos. 15 through 40, it merely appears that "Koxina" and "Barowa" were used "interchangeably" in the course of distributing the Non-Party Company's products before 2019; and even where the Non-Party Company used "바람폭풍" (Baram Pokpung) together with "Koxina" in a product name, as in "Koxina Baram Pokpung Jumbo Shower," it is difficult to find that the "Koxina" portion was not used as a trademark. Moreover, as discussed above, from 2016 the Non-Party Company sold numerous other goods using the Prior Used Trademarks in addition to the "Koxina Baram Pokpung Jumbo Shower," and the Actually Used Marks are similar in appearance to the marks of the Prior Used Trademarks and identical to them in how they are called. The Plaintiff's assertion therefore cannot be accepted.

D) The Plaintiff asserts that advertising expenditures for goods

other than “showers and the like” must not be taken into account in determining whether the Prior Used Trademarks were recognized by domestic consumers as trademarks of a particular person, and that the Non-Party Company’s advertising expenses therefore amount only to KRW 1,370,982.

However, in determining whether Article 34(1)13 of the Trademark Act applies, identity or similarity of the designated goods or the goods they are used on is not a requirement; and even where a trademark has been used on goods that are not identical or similar, it may constitute a prior used trademark under Article 34(1)13 of the Trademark Act if it has thereby come to be recognized as indicating the goods of a particular person. Accordingly, it cannot be found that the record of advertising expenses the Non-Party Company incurred to sell other related goods bearing the Prior Used Trademarks, apart from showers, must be excluded from the assessment of consumer recognition. The Plaintiff’s assertion in this part is therefore also without merit, and there is no need for further examination.

E) The Plaintiff asserts that, according to a trademark recognition survey the Plaintiff conducted, the Prior Used Trademarks were not recognized by domestic consumers as trademarks of a particular person.

According to the statements in Plaintiff’s Exhibit No. 10, the following facts are recognized: ① from August 4, 2022 to August 5, 2022 the Plaintiff conducted, through Data Spring Korea Co., Ltd., a trademark recognition survey of 1,011 persons who had purchased or used showers or water-pressure-boosting showers, water-softening showers, water-saving showers, water-purifying showers, and shower filters between January 2018 and August 2020; ② in that survey, 299 of the 1,011 respondents (29.6%) answered “yes” when asked whether they had heard of or seen the Prior Used Trademarks; and ③ when asked which company among “Coupang,” “Barowa,” and “Therapy Limited” used the Prior Used Trademarks as a manufacturing trademark, 115 of

the 299 respondents (38.5%) answered "Coupang," 53 (17.7%) answered "Barowa Co., Ltd.," the Non-Party Company, 33 (11%) answered "Therapy Limited," the Plaintiff's company, and 98 (32.8%) answered "I don't know."

However, the above survey results are difficult to accept at face value as objectively valuable statistics, since no material has been submitted from which the age, sex, or regional distribution of the survey respondents can be ascertained.

Moreover, even if credibility is granted to the above survey results, the recognition of a prior used trademark as the trademark of a particular person refers to an objective state recognized in accordance with the actual state of trade, with ordinary consumers as the standard; in this regard, it is not necessary that the name of the holder of rights in the prior used trademark be specifically known, and it suffices that the trademark can be recognized as indicating a single, consistent source even if it is not known who holds the rights (see Supreme Court Decision 2020Hu11431, decided December 30, 2021). Accordingly, the fact that approximately 30% of respondents in the above recognition survey answered that they had heard of or seen the Prior Used Trademarks may rather serve as a basis for finding that the Prior Used Trademarks were recognized as trademarks indicating the goods of a particular person. The Plaintiff's assertion is therefore not accepted.

D. Whether the Plaintiff Applied for the Applied Trademark at Issue for an Unjust Purpose

Taking together the following circumstances or facts, which may be found from the evidence cited above, the statements in Plaintiff's Exhibit No. 21 and Defendant's Exhibit No. 10, and the overall purport of the pleadings and oral arguments, it may be found that the Plaintiff applied for the Applied Trademark at Issue with unjust purposes such as imitating the Prior Used Trademarks and free-riding on the reputation and goodwill embodied therein.

1) As discussed above, the mark of the Applied Trademark at Issue and the marks of the Prior Used Trademarks are identical or similar.

2) At the time of application for the Applied Trademark at Issue, the Prior Used Trademarks were known among domestic consumers as trademarks of a particular person with respect to goods such as "showers, shower heads," and the application for the Applied Trademark at Issue was filed by designating goods such as "water-saving showers, shower heads," and the like in Class 11 of the classification of goods —the same goods as those on which the Prior Used Trademarks were used.

3) The Plaintiff has filed a total of 24 trademark applications from 2012 to the present. In 2019, the Plaintiff filed an application for the trademark "NOBRANDING 노브랜딩" designating goods such as "massagers," which was rejected on the ground of another person's earlier-filed trademarks such as "No Brand"; and on July 16, 2020—the day after the SBS show *Baek Jong-won's Alley Restaurant* broadcast the story of *deopjuk* ("덮죽") from Pohang, Gyeongsangbuk-do—the Plaintiff filed an application for the trademark "덮죽" by designating goods such as "rice bowls, beef and mushroom porridge," which was rejected on the ground of Article 34(1)12 of the Trademark Act. Since the Plaintiff had experience of filing numerous trademark applications that were rejected, it is reasonable to find that the Plaintiff would have checked whether similar trademarks were being used on related goods before applying for the Applied Trademark at Issue; and considering that the Prior Used Trademarks were recognized by domestic consumers as trademarks of a particular person around that time, the Plaintiff appears to have filed the application for the Applied Trademark at Issue despite knowing of the Prior Used Trademarks.

4) The Plaintiff asserts that the Applied Trademark at Issue was

created by the Plaintiff on the occasion of happening to encounter the Spanish language; however, according to the statements in Plaintiff's Exhibit No. 18, it is merely found that, in the "description of the trademark" column at the time of applying for the Applied Trademark at Issue, the Plaintiff stated: "Named as a trademark having the same pronunciation as '코시나' (Ko-si-na) in Korean, being 'COCINA,' which combines the **capital letter** 'A' with 'COCIN,' the **English** abbreviation of 'Control Staff Instructions,' meaning 'control staff instructions' in **American language**."

E. Sub-Conclusion

The Applied Trademark at Issue falls under Article 34(1)13 of the Trademark Act. The IPTAB Decision at Issue, which reached the same conclusion, is lawful.

4. Conclusion

Accordingly, the Plaintiff's claim seeking revocation of the IPTAB Decision at Issue is without merit and is therefore dismissed, and the court renders its decision as set forth in the Order.

Presiding Judge Jaheun KU
Judge Young Gi KIM
Judge Jihwan NOH