Panel Discussion

Comparative Application of DoE and IP Judiciary in the Future

「均等論の国際比較と未来の知財司法について」

The Dilemma: Balancing Two Values in DoE

VALUE 1: Protection of Innovation & Patentee Interests

- Prevents rigid, overly literal interpretation from undermining patents.
- Protects against insubstantial imitations & free-riding design-arounds.
- Ensures fair rewards for the underlying technological contribution.
- Maintains R&D investment incentives for groundbreaking breakthroughs.

VALUE 2: Legal Certainty & Third-Party Predictability

- Respects literal claim boundaries and public notice requirements.
- Prevents chilling effects on competitor activity & follow-on innovation.
- Enables clear freedom-to-operate (FTO) assessments for industry.
- Protects reliance on prosecution history and explicit claim amendments.

How do different jurisdictions control this balance through multi-factor tests and limiting doctrines?

均等論における二つの価値の最適なバランス

「実質的救済」と「法的安定性」をいかに調和させるか

イノベーション・特許権者の利益の保護

文言に拘泥した解釈は、特許の価値を損なう

非本質的部分のみを置換した模倣品からの保護

技術的貢献に即した公正な利益を確保する

ブレークスルー実現のためのR&D投資の確保

法的安定性・第三者の予測可能性の確保

クレームの権利範囲公示機能の尊重

健全な競争への萎縮作用の防止

産業にとっての自由行動領域の明確化

出願経過に対する信頼の保護

ディスカッションの視点 ➡ 各法域は、どのような法理と価値観により、両価値をバランスしているか？

Key Questions

1. Reaching beyond the Words: Where Should Courts Draw the Line?

（言葉を超えて～「文言の壁」をどこまで超えるべきか？）

2. Does Global Harmonization mean “Identical Answers”？

（ハーモナイゼーションとは、
全員が「同じ結論」を出すことか？）

Optimal Balance between Protection and Predictability

[Q101]

“In balancing 'Incentivizing Innovation' and 'Third-Party Predictability' under DoE, what industry structures, historical backgrounds, or legal cultures shape your jurisdiction's specific approach?”

均等論の適用における「イノベーションの保護」と「第三者の予測可能性」との適切なバランスについて、貴国（法域）で採用されているアプローチの背景にはどのようなものがありますか。産業構造や法文化の違いを考慮しつつ教えてください。

South Korea: The 5-Requirement Test

Requirement 1: Core Technical Idea

- Identifies problem-solving principle by examining specification and prior art (2012Hu1132).
- Focuses on substantial technological contribution over mere literal wording.

Requirement 2: Rule & Exception

- General Rule: Same function/effect if core technical idea is embodied.
- Exception (2018Da267252): If core idea is known at filing, shifts to element-by-element comparison.

Requirement 3: Easy Interchangeability

- Evaluated at the time of decision/infringement in Trial for Confirmation of Scope (2022Hu10210).
- Protects patentees against later-developed obvious substitutes.

Requirement 5: Conscious Exclusion

- Narrowing amendment alone is insufficient to bar equivalence (2014Hu638).
- Requires objective, explicit intent to exclude based on prosecution history.

韓国：均等の5要件

基本枠組み（均等の5要件）

日本と類似する5要件（大法院97후2200判決）

課題解決原理の同一性、作用効果の同一性、置換容易性、非容易導出性、特段の事情なし

第１要件：技術思想の核心

明細書と出願時公知技術を参酌して探究（2012후1132判決）

従来技術の課題を克服した特有の技術的思想の核心を実質的に評価

二段階の例外 ＆ 基準時

核心が出願時公知の場合「個別構成要素単位の比較」へ切り替える例外則（2018다267252判決）

置換容易性の基準時：審決時（侵害時）基準（2022후10210判決）

第５要件：意識的除外の厳格性

単なる減縮補正のみでは足りない（2014후638判決）

出願経過全体から意図的・外形的な除外意思が認められる場合に限定

Optimal Balance between Protection and Predictability

[Q102]

“How should the judiciary address criticisms from industry that pursuing substantial equity relies heavily on judges’ discretion and consequently lowers the predictability of litigation?”

実質的妥当性を追求することは、裁判官の裁量に大きく依存するため、結果として訴訟の予測可能性を低下させてしまうという批判に対して、司法はどのように応えるべきでしょうか。

UPC: The 4-Question Test

The Four-Question Test (Plant-e)

Q(i) Technical Equivalence

Does variant solve substantially same problem with same function?

Q(ii) Fair Protection

Is substitution obvious at infringement, proportional to contribution?

Q(iii) Third-Party Certainty

Would skilled person understand claims extend beyond literal wording?

Q(iv) Prior Art Defense

Does accused embodiment lack novelty or inventive step?

Key Judicial Trends in UPC Practice

- **Art. 2 of the Protocol on Art. 69 EPC**

  Balances fair protection for patentee with reasonable certainty for third parties across 18 member states.

- **Waiting for CoA Ruling**

  Court of Appeal has not yet ruled on DoE.

UPC：4問テストと近時の実務

4問テスト（Plant-e 基準）

i　技術的均等性
　実質的に同一の課題を解決し、同一の機能を果たすか？

ii　特許権者の公正な保護
　技術への貢献度に比例しているか、侵害発生時に当業者にとって自明か？

iii　第三者の合理的な法的確実性
　当業者が、保護範囲が文言より広いことを理解できるか？

iv　先行技術に対する新規性・進歩性
　被疑侵害物が先行技術と比較して新規性・進歩性を有するか？（Gillette／Fornstein抗弁が成立しないこと。優先日を基準に判断）

UPCの実務動向

18の加盟国における「統一された予見可能性」を目指す

EPC69条解釈議定書2条に基づく均等物考慮

控訴審ではいまだ判断を示しておらず

Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

JSIP 2026 Mock Trial Case

Decision and reasoning

Presiding Judge Ronny Thomas
Düsseldorf Local Division

Grounds of the Decision

[A] A stand for a mobile device comprising a mounting portion on which a mobile device is placed, and a base portion to which said mounting portion is rotatably connected via a hinge shaft, the stand for a mobile device characterized by comprising:

[B] a plurality of recesses formed in said base portion along the periphery of the hinge shaft;

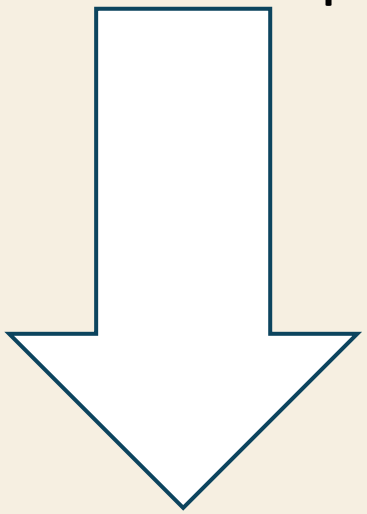
[C] a protrusion protruding from the mounting portion side and mating with said recesses at a predetermined position; and

[D'] **a metal compression coil spring** that biases said protrusion.

[E] (Concluding clause characterizing the stand)

Starting Point

[D'] **a metal compression coil spring** that biases said protrusion.



Equivalence?

[d] **a metal leaf spring** that biases said protrusion.

Equivalence test

1. **Technical equivalence:** Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

2. Is extending the protection of the claim to the equivalent proportionate to a **fair protection for the patentee**?

3. Reasonable **legal certainty for third parties**: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

4. **Is the allegedly infringing product novel and inventive over the prior art?**

Technical equivalence: Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

[0007] Therefore, the primary object of the present invention is **to provide a stand** for a mobile device that exhibits a robust and stable angle-holding function **without a reduction in holding force caused by component wear or material degradation over time.**

[…]

[0010] According to the present invention, it **is provided a stand** for a mobile device that exhibits a robust and stable angle-holding function **without any decline in holding power due to component wear or material degradation over time.**

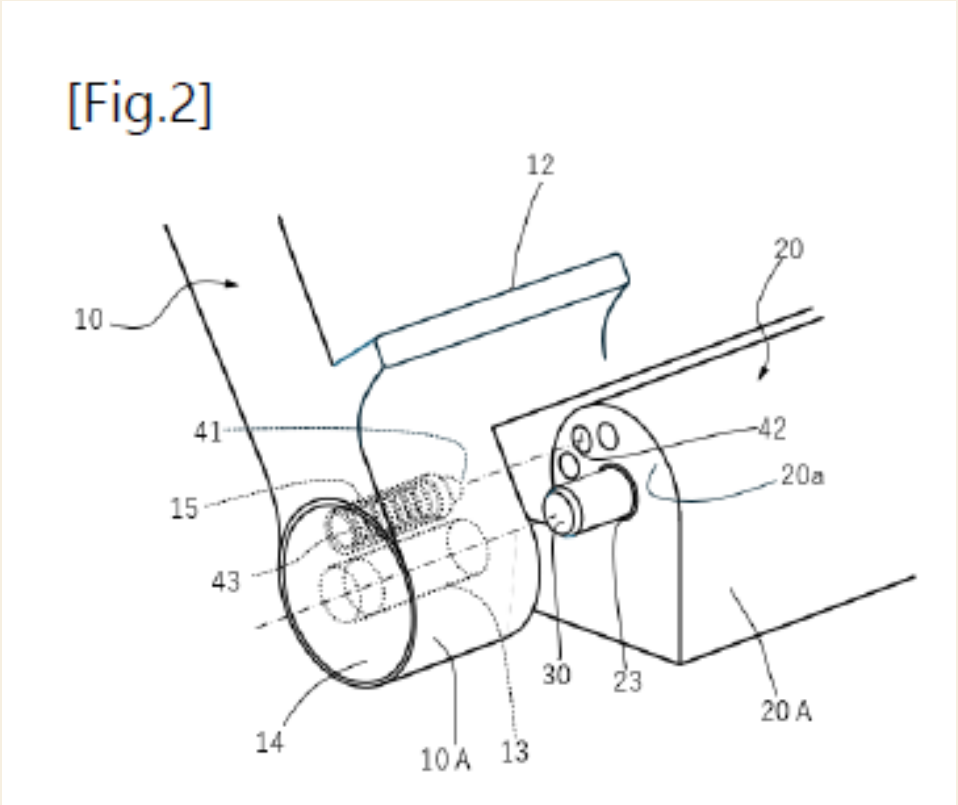
Technical equivalence: Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

What is the specific function of feature D'?

… to **provide a continuous mechanical biasing force** that **urges protrusion toward the recess openings**,

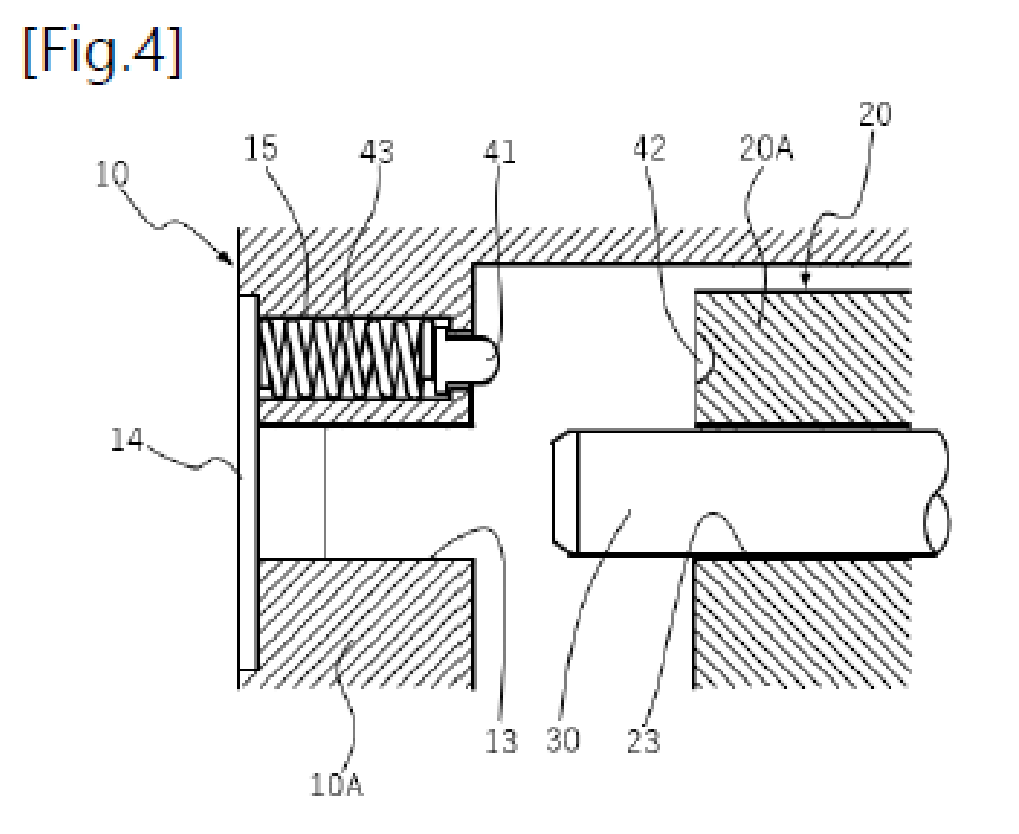
and

to **generate a restoring force that causes that protrusion to snap into a recess** when aligned, **producing the characteristic 'click'.**

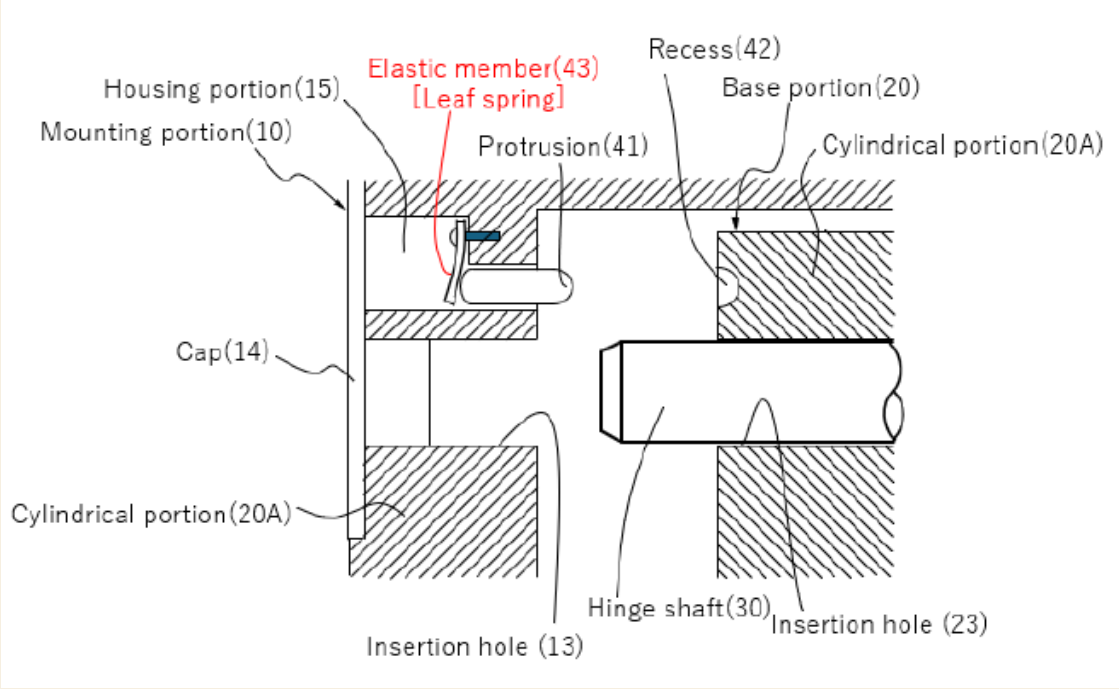


Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

Technical equivalence: Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?



Patent in suit



Challenged embodiment

Technical equivalence: Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

[0024] As shown in FIGS. 2 and 3, the elastic member 43 of this embodiment is a metallic compression coil spring.

The compression coil spring 43 is accommodated in the housing portion 15.

Being guided by the inner peripheral surface of the housing portion 15, it is compressed in the axial direction of the hinge shaft 30, thereby biasing the protrusion 41 toward the end face 20a side of the cylindrical portion 20A of the base portion 20.

Equivalence test

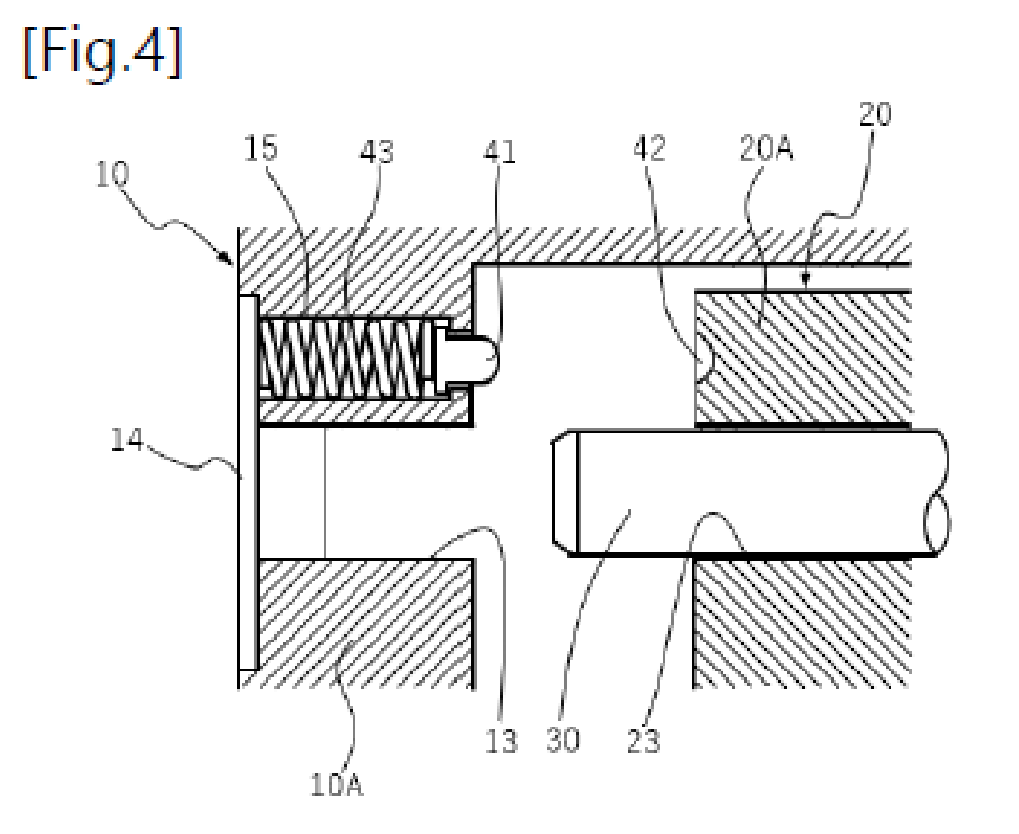
1. **Technical equivalence:** Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

2. Is extending the protection of the claim to the equivalent proportionate to a **fair protection for the patentee**?

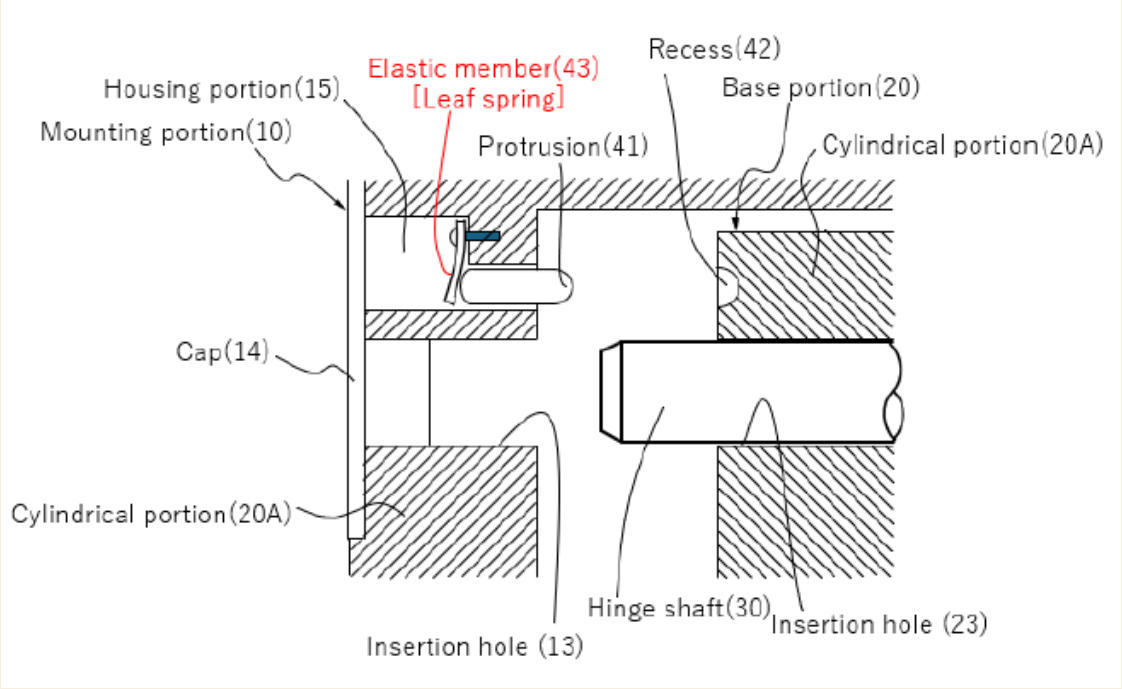
3. Reasonable **legal certainty for third parties**: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

4. **Is the allegedly infringing product novel and inventive over the prior art?**

Is extending the protection of the claim to the equivalent proportionate to a fair protection for the patentee?



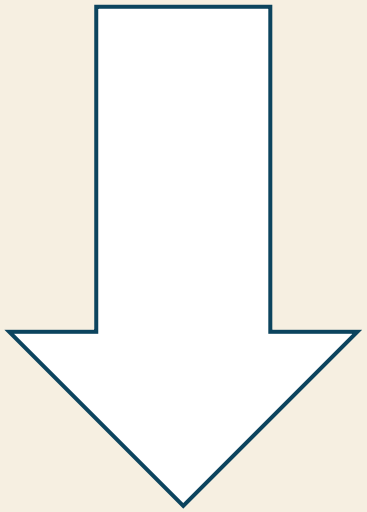
Patent in suit



Challenged embodiment

Is extending the protection of the claim to the equivalent proportionate to a fair protection for the patentee?

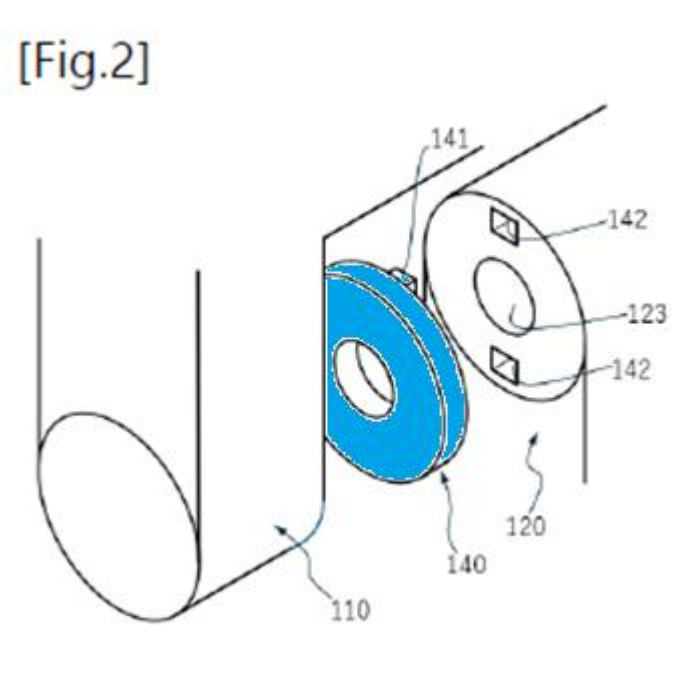
[D] **an elastic member** that biases said protrusion.



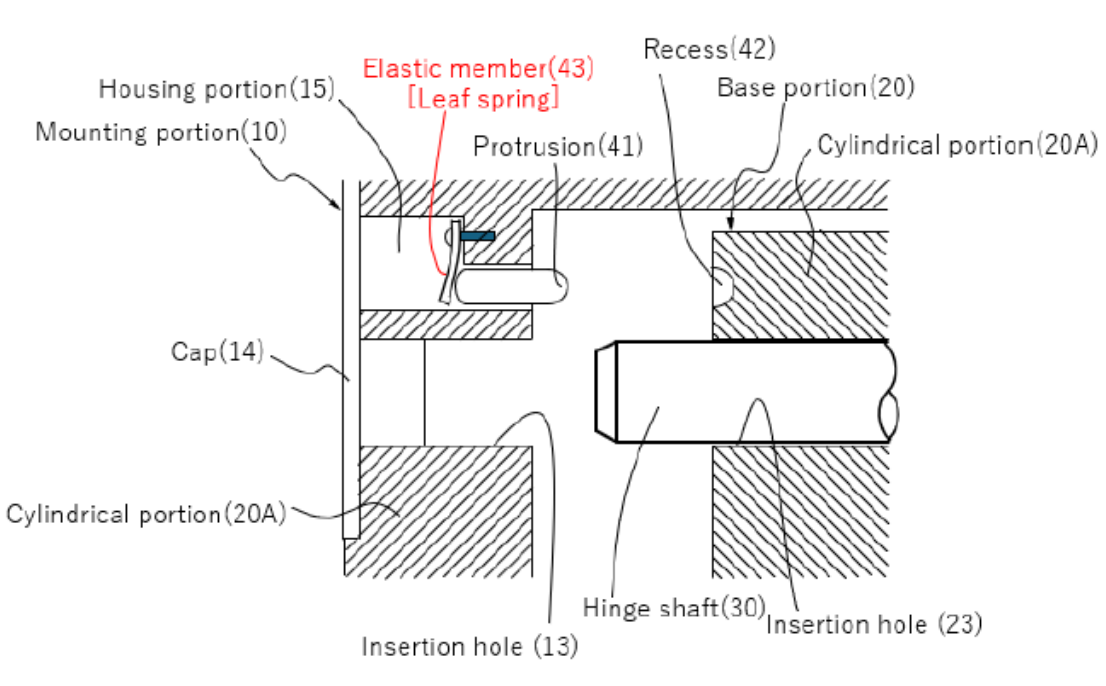
Amendment during the patent granting procedure

[D'] **a metal compression coil spring** that biases said protrusion.

Is extending the protection of the claim to the equivalent proportionate to a fair protection for the patentee?



Prior art document



Challenged embodiment

Is extending the protection of the claim to the equivalent proportionate to a fair protection for the patentee?

Problem: Using a metal leaf spring was not known at the priority date, but at the time of infringement

- **General rule:**
  In principle, the scope of protection is determined on the basis of the **priority date**.

- BUT:
  Is it fair, that the variation is not **based on** creative considerations, but rather on **the infringer benefiting from general technical progress?**

- **Solution:**
  It is sufficient that the conditions of equivalence are met, provided that the skilled person was aware of the variation at the priority date, even if it only became available later.

Equivalence test

1. **Technical equivalence:** Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

2. Is extending the protection of the claim to the equivalent proportionate to a **fair protection for the patentee**?

3. Reasonable **legal certainty for third parties**: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

4. **Is the allegedly infringing product novel and inventive over the prior art?**

Reasonable legal certainty for third parties: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

- **Patent in suit consistently describes** the component in question as an **‘elastic member’** and explains that its function to generate a biasing/restoring force to urge the protrusion into the recesses.

- Where a **metal coil spring is mentioned**, this is done **solely in the context of a preferred embodiment**, without the patent in suit attributing any particular advantages to such a metal coil spring.

- There is **no indication** that the **mention of a ‘metal coil spring’ is intended to exclude other metal springs** from the scope of protection of the patent in suit.

Equivalence test

1. **Technical equivalence:** Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

2. Is extending the protection of the claim to the equivalent proportionate to a **fair protection for the patentee**?

3. Reasonable **legal certainty for third parties**: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

4. **Is the allegedly infringing product novel and inventive over the prior art?**

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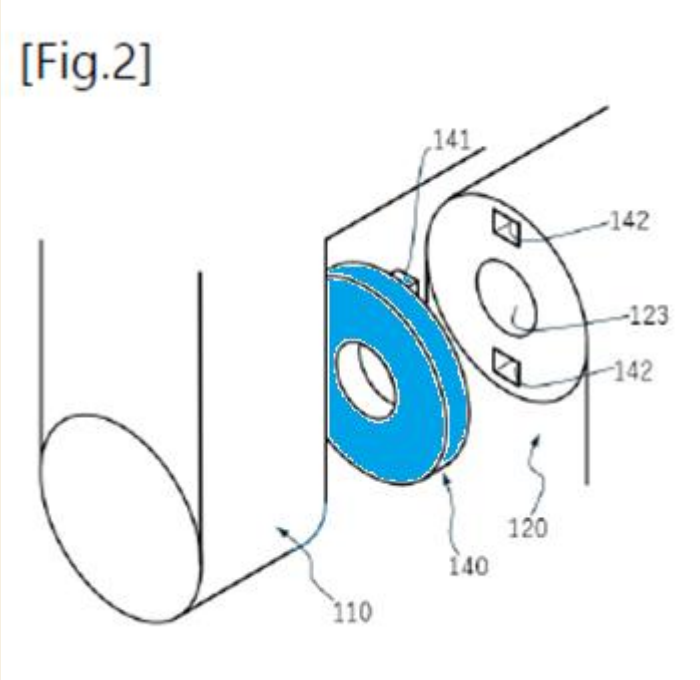
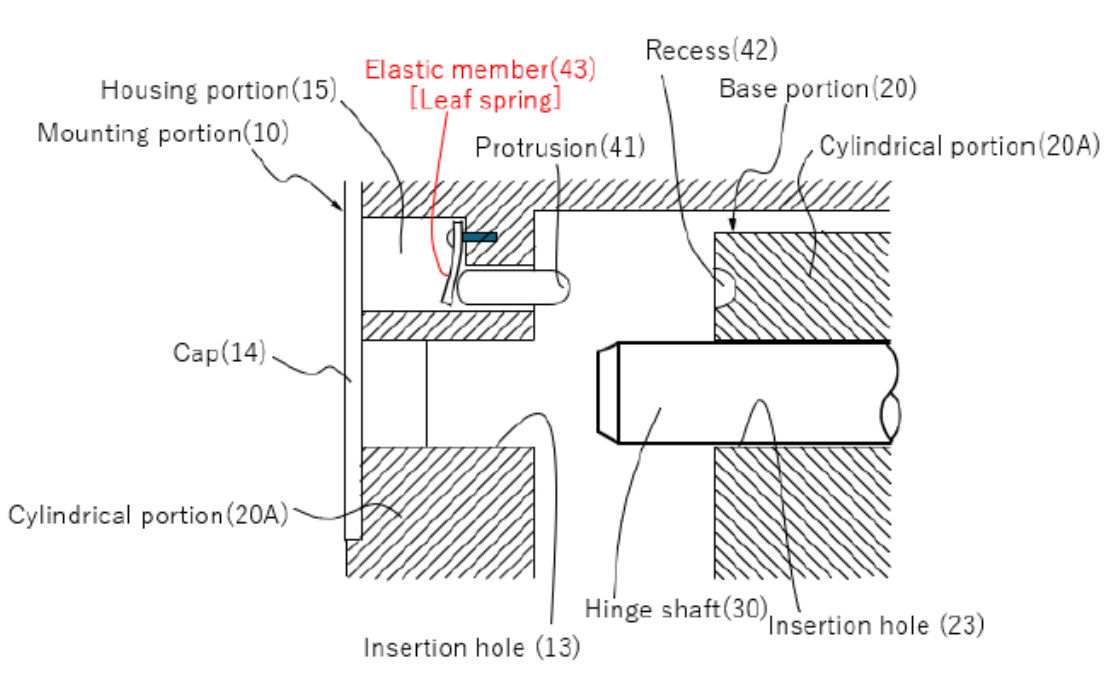


Prior art document



Challenged embodiment

Equivalence test

1. **Technical equivalence:** Does the variation solve (essentially) the same problem that the patented invention solves and performs (essentially) the same function in this context?

2. Is extending the protection of the claim to the equivalent proportionate to a **fair protection for the patentee**?

3. Reasonable **legal certainty for third parties**: Does the skilled person understand from the patent that the scope of the invention is broader than what is claimed literally?

4. **Is the allegedly infringing product novel and inventive over the prior art?**

Decision

1. The challenged embodiment makes use of the technical teachings of the patent in suit, with feature D’ being realised by equivalent means.

2. An injunction is issued as requested.

3. Donkey is ordered to pay damages as requested.

Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

Thank you for your attention!

United States: The FWR Test & Strict Limiting Doctrines

Evaluation Framework

Function-Way-Result (FWR) Test

Substantial identity in Function, Way, and Result (*Graver Tank*).

Insubstantial Differences Test

Evaluates whether differences are insubstantial to a person skilled in the art.

Strict Limiting Doctrines

All-Elements Rule

Must be satisfied for each individual claim element (*Warner-Jenkinson*)

Prosecution History Estoppel (*Festo/Honeywell*)

Narrowing amendments trigger presumption of surrender; rebuttal limited.

Public Dedication Rule (*Johnson & Johnston*)

Subject matter disclosed in specification but unclaimed is dedicated to the public.

Hypothetical Claim Analysis

DoE cannot encompass prior art (*Wilson Sporting Goods*).

United States: The FWR Test & Strict Limiting Doctrines

均等論の基本テスト

FWRテスト（Function-Way-Result）

実質的に同一の機能、方法、結果か

（*Graver Tank*）

Insubstantial Differencesテスト

相違点が非本質的か

（*Warner-Jenkinson*）

均等を制限する抗弁等

All-Elements Rule（*Pennwalt*）

クレームの構成要素ごとに個別判断

出願経過禁反言（*Festo* / *Honeywell*）

特許性に関する減縮補正は原則放棄と推定（Festo推定）

公衆への提供（*Johnson & Johnston*）

明細書開示・未クレーム事項は公衆提供（Dedication）とみなす

仮想クレーム・先行技術の抗弁（*Wilson Sporting Goods*）

無効化（Vitiation）の法理

Court's Ruling — From the Bench

Question 1: Disavowal or Disclaimer

- Pony succeeds, and the Court moves to *Festo*.

Question 2: Rebuttal of *Festo* Presumption

- Donkey prevails, and the Court finds no infringement.

Question 3: Equivalence

- The Court need not reach question three because it finds no infringement at the *Festo* stage.

Court's Ruling — From the Bench

Court

Question 1: Disavowal or Disclaimer

- The Court finds in Pony's favor; Pony did not use "clear and unmistakable" disclaimer in its amendment that "would have been evident to one skilled in the art." *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063-64 (Fed. Cir. 2016).

Court's Ruling — From the Bench

Court

Question 2: Rebuttal of *Festo* Presumption

- Pony does not rebut the *Festo* Presumption; leaf springs represent "old technology" that should have been "known in the prior art in the field of the invention," *Festo X*, 344 F.3d at 1369, and Pony's amendment to its patent ***was explicitly*** "made to avoid prior art that contains the equivalent in question [and thus] is not tangential," *id.* at 1370.

Court

Court's Ruling — From the Bench

Question 3: Equivalence

- Because Pony did not rebut the *Festo* presumption, the Court need not reach the equivalence question. However, if it did, it would likely find no equivalence because although both springs provide the same "function" to achieve the same "result," they both succeed in different "ways," a coil spring through compressive force and a leaf spring through bending force. That different way precludes finding infringement based on the doctrine of equivalence.

Court's Ruling — From the Bench

Court

Final judgment in favor of Donkey!

Donkey's product does not infringe Pony's patent.

Optimal Balance between Protection and Predictability

[Q103]

“If strict formal boundaries are maintained, how should true innovators be protected from the risk of well-funded companies free-riding through merely formal design arounds?”

厳格な文言解釈の壁が維持される場合、資金力のある企業による形式的な設計回避を通じたフリーライドのリスクから、真のイノベーターはどのように保護されるべきでしょうか。

Japan: The Ball Spline 5-Requirement Test

Ball Spline 5 Requirements (Supreme Court, 1998)

Req. 1: Non-Essential Part
Difference is not an essential part of patented invention.

Req. 2: Interchangeability
Achieves same object and function/effect.

Req. 3: Easy Interchangeability
Obvious to skilled person at time of infringement.

Req. 4: Prior Art Defense
Accused product is not identical to or easily conceivable from prior art.

Req. 5: Absence of Special Circumstances
No intentional exclusion during prosecution history.

Grand Bench Refinements (Maxacalcitol)

Req. 1 (IP High Court Grand Panel, 2016)
Determined by 'characteristic part constituting unique technical idea over prior art' (Identity of Technical Idea).

Req. 5 (Supreme Court, 2017)
Special circumstances exist when applicant objectively/externally indicated alternative embodiment but intentionally omitted it from claims.

Equitable Balance
Protects substantial technological value while preventing bad-faith exploitation of literal claim gaps.

日本法：ボールスプライン5要件

ボールスプライン事件最判（1998年）の5要件

① 非本質的部分（相違部分が特許発明の本質的部分でないこと）
② 置換可能性・作用効果の同一性（置き換えても特許発明の目的を達成でき、同一の作用効果を奏すること）
③ 置換容易性・容易想到性（当業者が対象製品等の製造等の時点で容易に想到できたこと）
④ 非容易推考性（対象製品等が出願時の公知技術と同一又はそれから容易に推考できたものでないこと）
⑤ 特段の事情がないこと（出願手続で特許請求の範囲から意識的に除外されたなどの特段の事情がないこと）

第1要件：マキサカルシトール事件知財高判

特許発明の特徴的部分の認定
従来技術と比較した特有の課題解決原理

➡本件への示唆
ゴムの摩耗・劣化という課題に対して提供した技術的貢献は、「金属ばね＋凹凸嵌合」の機械的構造

第5要件：マキサカルシトール事件最判

意識的除外の成否（客観的、外形的にみて「表示」）
代替構成を認識しながらあえて記載しなかったとき

➡本件への示唆
「ゴム」を排除する補正が、「板ばね」を外形的に放棄した表示といえるか？

Key Questions

1. **Reaching beyond the Words: Where Should Courts Draw the Line?**

   （言葉を超えて～「文言の壁」をどこまで超えるべきか？）

2. **Does Global Harmonization mean “Identical Answers”?**

   （ハーモナイゼーションとは、
   全員が「同じ結論」を出すことか？）

Key Questions

1. Reaching beyond the Words: Where Should Courts Draw the Line?
   （言葉を超えて～「文言の壁」をどこまで超えるべきか？）

2. Does Global Harmonization mean “Identical Answers”？
   （ハーモナイゼーションとは、
   全員が「同じ結論」を出すことか？）

Ideal Form of Global Harmonization

[Q202]

"If objective and uniform rules were established globally, would it be ideal for companies if equivalence were determined through a completely mechanical and strict application of these rules, thereby eliminating the variability and uncertainty of human interpretation?"

客観的で統一されたルールが世界的に確立されたとして、人間の解釈によるばらつきや不確実性を排除するために、AI等により、完全に機械的かつ厳格なルールの適用によって均等侵害が判断されるようになることは、企業にとって理想的でしょうか。

Ideal Form of Global Harmonization

[Q201] “In global IP practice, what do you consider to be the ideal form of harmonization?”

[Q203] “How should the IP judiciary in the future overcome the dilemma between ‘tailored justice fitting local legal culture’ and ‘unified global trust in the patent system’ to prevent fragmented and inconsistent outcomes across borders?”

国際的な知財実務において、どのようなハーモナイゼーションが理想的と考えますか。

将来の知財司法は、国境を越えた判断の分裂や不一致を防ぐために、「各国の法文化に合わせたきめ細やかな正義」と「特許制度への統一的な信頼」のジレンマをどのように克服すべきでしょうか。

Key Questions

1. Reaching beyond the Words: Where Should Courts Draw the Line?

（言葉を超えて～「文言の壁」をどこまで超えるべきか？）

2. Does Global Harmonization mean “Identical Answers”？

（ハーモナイゼーションとは、
全員が「同じ結論」を出すことか？）

’Human Interpretation’ & The Value of IP Judiciary

Addressing 'Shortcomings of Language'

- Rigid mechanical determination risks creating loopholes for copycats.
- Inherent limits of language require judicial evaluation of substantial technical contributions.

Disciplined Pluralism as Harmonization

- Harmonization is not achieving identical outcomes globally (Common answers).
- Sharing common analytical frameworks (Common questions) while explaining reasons transparently.

Enduring Value of Human Practice

- Discerning genuine innovation in boundary cases.
- Balancing equity, public notice, and social context through reasoned justice that AI cannot replace.

知財司法の価値とは

言葉の限界を越え、対話を通じて実質的正義を実現する普遍の役割

言語の限界への対応

特許における「言葉不足」

形式的・機械的判定は、ルールの隙間を狙う抜け道を許し、イノベーションを阻害する

限界事例での柔軟な解釈の不可欠性

ハーモナイゼーション

全員が同じ「結論」を出すことではない

同じ「問い」と「枠組み」を共有する

判断の理由を比較可能かつ透明に説明し合う調和の姿

人間たる法曹の価値

社会の要請や衡平の理念を汲み取る

当事者との対話を通じた判断

AIに代替されない本質的役割