



INTERNATIONAL SYMPOSIUM 2018

Patent Litigation in Japan and Germany

11:30

Session 2:


Claim construction and doctrine of equivalence in Japan and Germany after *maxacalcitol* and *pemetrexed* – Principles, case law and comparative case study

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Construction of Claim and Doctrine of Equivalents in Japan

2018.10.4

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Outline

- I. Claim Construction
- II. Doctrine of Equivalents: The Supreme Court judgment on “Ball Spline Bearing” case (1998)
- III. 5th Requirement: The Supreme Court judgment on “Maxacalcitol” case (2017)
- IV. 1st Requirement: IP High Court Grand Panel judgment on “Maxacalcitol” case (2016)
- V. Case Study

I Claim Construction

1. The reference for claim construction

1. “The technical scope of a patented invention shall be determined based upon **the statements in the scope of claims** attached to the application.” (§ 70 I)
2. “[T]he meaning of each term used in the scope of claims shall be interpreted in consideration of **the statements in the description and drawings** attached to the application.” (§ 70 II)
3. **Dictionary definition**
4. **File wrapper estoppel** or **Prosecution history estoppel** (general principle of civil litigation)

File Wrapper Estoppel

- i) When the patentee has explicitly acknowledged certain structure does not fall within the scope of claims by intentionally excluding the structure from the scope of claims;
- ii) When the patentee has made amendments to exclude certain invention in response to the notice of reasons for refusal or the decision of refusal;
- iii) When the patentee has made written remarks or oral statements to limit the scope of claims, and the patent was granted accordingly;
- iv) When the patentee is making an allegation which contradicts to the prior allegations in previous invalidation trial.

2. Consideration of Publicly Known Art

In the 20th Century Japan... limited the scope of claim by excluding publicly known art from the patented invention

- $A+B+C=A1+B+C$ ($A2+B+C$ =Publicly Known Art)



After the Supreme Court judgment on “Kilby” case in 2000 and subsequent revision of the Patent Act in 2004... literally construed

- $A+B+C=A+B+C \Rightarrow$ (patent invalidation) \Rightarrow correction to restrict the scope of the claim to $A1+B+C$.

3. Technical Meaning

- A claim must be construed according to its literal meaning even when the structure of defendant's product is found to have the same function as patented invention considering the statements in the specification.
- If the defendant's product is beyond the scope of literal meaning of the claim, infringement under DOE shall be considered.

II Doctrine of Equivalents :
Supreme Court Judgment (Feb.
24th, 1998. “Ball spline bearing”
case)

Five Requirements of DOE

- Even if there is a part in elements of a patent claim, which is literally different from products and processes (“product”),
 - ① this part is **not the essential part** of the patented invention (non-essential part);
 - ② the purpose of the patented invention can be achieved by replacing this part with a part in the product and an **identical function and effect** can be obtained (interchangeability);
 - ③ a person having ordinarily skilled in the art could **easily come up with** the idea of such replacement at the time of the production of the product (conceivability of interchange);

④ the product is not identical to the technology in the **public domain** at the time of the patent application of the patented invention or could not have been easily conceived at that time by the person (public domain);

⑤ there were **no special circumstances** such as the fact that the product had been **intentionally excluded** from the scope of the patent claim in the patent application process (no special circumstances);
the product should be regarded as equivalent with the elements of the patent claim and fall within the scope of the technical scope of the patented invention.

Burden of proof on the fulfillment of the five requirements for DOE

- Requirements ①~③
⇒ The patentee
- Requirements ④~⑤
⇒ The alleged infringer

JAPAN	GERMANY
1 Non-essential part	
2 Interchangeability	Same effects : the variant solves the problem underlying the invention with means that have objectively the same technical effects
3 Conceivability of the interchange	Obviousness: a person having ordinary skill in the art could easily come up with the variant having objectively the same effects
4 Public domain	(Prior art defense)
5 No special circumstances	Claim orientation: a person having ordinary skill in the art was able to find the variant by considerations oriented to the technical teaching of the claim as a variant having the same technical effects

III 5th Requirement (Special Circumstances)

“[T]here is no special circumstances such as the fact that the product had been intentionally excluded from the scope of the patent claim in the application process”

(The basis for this requirement)

- If the patentee had once acknowledged that the product does not belong to the technical scope of claim, or
- If he had behaved as if he had objectively acknowledged so by intentionally excluding the technology from the scope of claim in the patent application process,



the patentee is not entitled to claim otherwise afterwards

∴ against the doctrine of estoppel

1. Amendment and Correction

- An invention which was excluded from the scope of claims by amendment or correction to restrict the scope.
- An invention which the patentee acknowledged as not falling within the technical scope of claims in documents submitted in application process or trial process.

2. Equivalent materials and arts that already existed at the filing date

Competing theories:

- It cannot be considered as a special circumstance for not including into the scope of claims the structure which was easily conceived of, because it is a mere omission.

or

- It should be considered as a special circumstance because the applicant intentionally omitted the structure from the scope of claims while a person having ordinary skill in the art could have easily conceived of the structure at the time of filing, or amended the scope of claims to include the structure during the application process.

Maxacalcitol case

The Invention (Claim)

- starting material (cis-form vitamin D structures)
- ↓ reagent
- intermediate (cis-form vitamin D structures)
- ↓ reducing agent
- objective substance

The Appellants' Process

- starting material (trans-form vitamin D structures)
- ↓ reagent
- intermediate (trans-form vitamin D structures)
- ↓ reducing agent
- objective substance

Scene in question

- The applicant did not mention the structure for defendant's product in the scope of claims while the applicant could have easily conceived of such structure as of the filing date.



- (1) Can be said that special circumstances exist based on this fact alone?
- (2) If not, in what particular cases can it be said there are special circumstances?

(1) Can it be said that special circumstances exist based on this fact alone?

- This fact alone does not infer there is a special circumstance to deny the application of DOE.

(reasons)

- A mere fact that the applicant omitted the defendant's product from the scope of claims when the applicant could have easily conceived of such structures at the time of filing does not cause third parties who receive the disclosure of the specification to believe that the defendant's product was excluded from the scope of the claims.
- If it is forbidden to allege that the defendant's product falls within the technical scope of the patent invention on the grounds of DOE only because the applicant did not state other easily conceivable structures in the scope of claims, the expected result would be inequitable.

(2) In what cases can it be said there are special circumstances?

- If the applicant is objectively and visibly determined to have indicated his intention of omitting statements concerning defendant's product from the scope of claims even though the applicant recognized such structure could substitute for the structure stated in the scope of claims, it can serve as a ground for recognizing the special circumstances.

(reasons)

- The applicant has acted in a way to cause third parties to believe that the defendant's product does not fall within the technical scope of the patented invention with the applicant's consent.
- The above ruling is reasonable for consistency with the purpose of the Patent Act, which is to encourage inventions through promoting their protection and utilization, thereby contributing to the development of industry, as well as for adequately coordinating interests between patent applicants and third parties.

3. Japanese Supreme Court rulings in comparison with rulings of German Federal Court of Justice

The ruling of the "Maxacalcitol" case is similar to the ruling of the "Occlusion Device" case in Germany.

- "clamping, soldering, brazing, welding" were disclosed in the description, but only "clamping" was mentioned in the claim.
...special circumstance to indicate intentional exclusion.

There is no general consensus in Japan on a case like "Pemetrexed" case in Germany, where only a generic concept "antifolate" was written in the specification.

Competing opinions in Japan:

- There is no intentional exclusion because the patentee is not considered to have acknowledged the structures of defendant's product do not belong to the technical scope of claims.

or

- Limiting the scope of claims to Pemetrexed Disodium while writing generic concept "antifolate" in the specification implies intentional exclusion when it is obvious to the person having ordinary skill in the art that "antifolate" includes both Pemetrexed Disodium and Pemetrexed Dipotassium.

IV 1st Requirement: “essential part” of the patented invention

- [E]ven if the structure stated in the scope of claims contains any part that is different from that of the product manufactured, etc. by the other party or the process used thereby, said part is not the essential part of the patented invention.

Thank you for your attention.



MAKIKO TAKABE

Chief Judge,
IP High Court of Japan

Claim Construction and the Doctrine of Equivalence

International Symposium 2018 –
Patent Litigation in Japan and Germany
4 October 2018, Munich

Dr Klaus Grabinski
Judge, Bundesgerichtshof (Federal Court of Justice)

I. European Patent Convention (EPC)

- **Art. 69 EPC**

(1) The extent of the protection conferred by a European Patent ... shall be determined **by the claims**. Nevertheless, **the description and the drawings** shall be used to interpret the claims.

(2) ...

○ **Protocol on the Interpretation of Art. 69 EPC**

(1) Claims shall

- not be interpreted by the strict literal meaning of the words used,
- not be taken as a mere guideline,
- be interpreted as defining a position that combines
 - a fair protection for the patent proprietor with
 - a reasonable degree of legal certainty for third parties.

(2) “For the purpose of determining the extent of protection conferred by a European patent, **due account** shall be taken of **any element** which is **equivalent** to **an element specified in the claims.**”

Two-step-approach

- Lord Neuberger in Actavis/Eli Lilly, para 54:
 - „ (i) Does the variant infringe any of the claims as a matter of *normal interpretation*?“
 - and if not:
 - „ (ii) Does the variant nonetheless infringe because it *varies* from the invention in a way or ways which is or are *immaterial*?“

II. Elements specified in the claim

Purposive claim construction (*wortsinngemäÙe Anspruchsauslegung*)

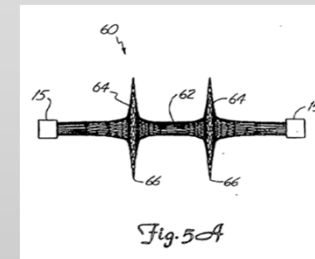
- **All features** of the claim matter (all-elements rule).
- The **description** and the **drawings** shall
 - **always be considered** when construing the claim and
 - may serve as a **dictionary of the claims**.
- The claim shall be construed from the angle of a **person skilled in the art (psa)**.

Inter alia:

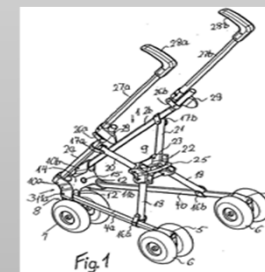
- Declaration of the patent applicant or the examiner during prosecution may give an indication of the psa's understanding of the patent claim (Federal Court of Justice (BGH), 5 June 1997 – X ZR 73/95 – Steeping device II; 14 June 2016 – X ZR 29/15 – Pemetrexed).

- When **several examples** are described to be **in accordance with the invention**, in case of doubt, the **patent claim** should be understood to **cover all these examples**.
- This is **only different** when the teaching of **the patent claim cannot be reconciled with the description and the drawings** so that an **irresolvable contradiction** remains.
- Examples

- BGH, 10 May 2010 - “Occlusion device”



- BGH, 2 June 2015 - “Cross bar”



III. Doctrine of Equivalence

1) The Pemetrexed case

(Bundesgerichtshof, 14 June 2016 – X ZR 29/15 – Pemetrexed)

– **Claim:**

- Use of **pemetrexed disodium** in the manufacture of a medicament
- for use in combination therapy for inhibiting tumor growth in mammals ...
- in combination with vitamin B12 or a derivative thereof, ...

– **Description:**

- Examples of antifolates that are used as antineoplastic agents are mentioned, *inter alia* pemetrexed disodium.
- However, these medicaments have toxic effects.

– **Problem:**

- Reduction of the toxic effects on the patient that are caused by administering pemetrexed disodium as an antifolate.

– **Allegedly infringing product:**

- A medicament according to the claim but containing **pemetrexed dipotassium** as an active substance.

– **Claim construction**

- **Pemetrexed disodium** cannot be interpreted as meaning **pemetrexed**.
- **Pemetrexed dipotassium is not an element specified in the patent claim.**

- **Is pemetrexed dipotassium “an element equivalent to an element specified in the patent claim”?**

2) Three-Step-Test

Element equivalent to an element specified in the claim

- i. Does it have essentially the *same effect*?
 - ii. Was it *obvious* to the psa that it has essentially the same effect?
 - iii. Would the psa have been able to find it as having essentially the same effect by *considerations oriented to patent claim*?
- **Prior art defence** (Formstein defence)

i. Same effect

Does the variant element have essentially **the same effect**?

- Review of **which effects can be achieved by the elements specified in the patent claim.**
- **The totality of these effects** represent the solution according the patent and **have to be achieved by the variant.**
- **No distinction between essential and non-essential effects.**

(Federal Court of Justice, 13 January 2015 – X ZR 81/13, [2015] IIC 721 - Cooking pan)

ii. Obviousness

Was it **obvious** that the variant element has the same effect?

- Has it been **obvious** at the priority date that the variant element has **objectively the same effect**.

(Federal Court of Justice, 5 May 1999 - X ZR 156/97, [2002] IIC 525 - Snow Removal Plate)

- In case of a **”unforeseeable equivalent”** it might be assumed that the psa already knew of the variant element at the time of the priority date.

(Higher Regional Court Düsseldorf, 14 January 2009 - Time-shifted TV and supportive literature, 7 July 2016 – Collecting device for particles)

iii. Claim orientation

Was the psa able to find the variant by **considerations oriented to the teaching of the patent claim** as having the same effect?

- **No**, when the patent claim appears as a **selection decision** that the variant element shall not be protected.
 - Similar Lord Neuberger in Actavis/Eli Lilly, para 66:
“Would the psa have concluded that strict compliance with the literal meaning of the claim was an essential requirement?”

Selection decision

- Yes, when **two elements** having the same effect are disclosed in the **patent description** but **only one** is included in the **patent claim**.
 - like in the “Occlusion device” case
 - but pemetrexed dipotassium was not disclosed in the patent description.
- It is **not sufficient** for approving a selection decision that the **element specified in the patent claim** appears as a **special application of a general principle**.
 - Pemetrexed disodium and pemetrexed dipotassium belong to the group of antifolates and antifolates were mentioned in the patent description.

- When there is an indication that the element specified in the claim was **chosen** by the patent applicant in order **to delineate what shall be claimed from prior art**.
 - In the application originally the protection for the use of an undetermined antifolate was claimed before the claim was reduced to pemetrexed disodium.
 - However, there was no indication that this choice was made in order to distinguish the patent from prior art.

**Willkommen
beim Bundesgerichtshof
in Karlsruhe**



Thank you very much for your attention!

Case Study on Claim Construction and Doctrine of Equivalence

Patent: The patent relates to a hinge for a toilet seat. More particularly, it relates to a hinge enabling the fixation of a toilet seat to a ceramic body.

Feature analysis of Claim 1 of the patent reads as follows:

- (1) Hinge for a toilet seat (6, 8) for fixation of a toilet seat assembly (1) to a ceramic body (10).
- (2) The hinge for the toilet seat (6, 8) has
 - (2.1) a damping means (11, 12) for reinforcing the seat assembly (1) during the rotation of the seat and the seat cover (2) of said assembly
 - (2.2) and an adapter member (20).
- (3) The damping means (11, 12) is received in a **reception bore (44, 46)** of a mounting link (40, 42) of said seat assembly (1).
- (4) The adapter member (20)
 - (4.1) is connected with a fixing device (26) which is secured in said ceramic body (10),
 - (4.2) is rotatably connected with the damping means (11, 12),
 - (4.3) has an approximately cylindrical base body in which a **radial blind bore (24)** is formed for insertion on a gudgeon (26).

Subclaim 5 of the patent claims for the **reception bore (44, 46)** of feature (3) a stepped bore or a through-hole bore.

Description:

- (i) Para [0036] describes that the reception bore in which the damping means is received can be a stepped bore or a through-hole bore alternatively.
- (ii) The description does not include any definition of a radial blind bore.
- (iii) Para [0048] mentions: “The gudgeon fixes the toilet seat assembly to the ceramic body of the toilet. A sufficient distance between the seat assembly and the ceramic body should be secured by means of the adapter member so that the seat and the seat cover of the seat assembly can be rotated.”

Fig. 1 of the patent:

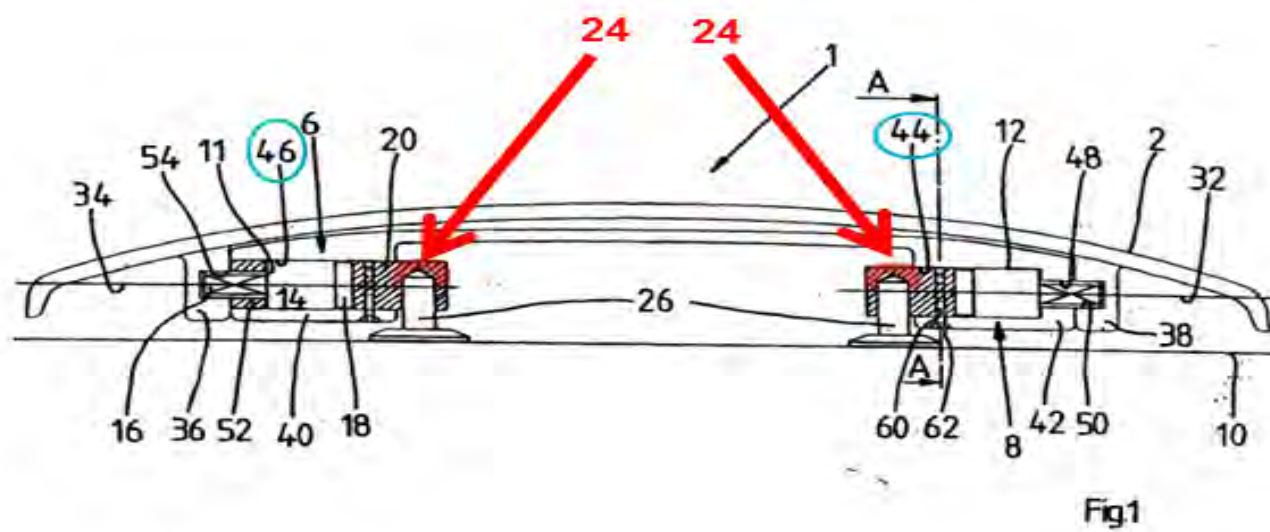
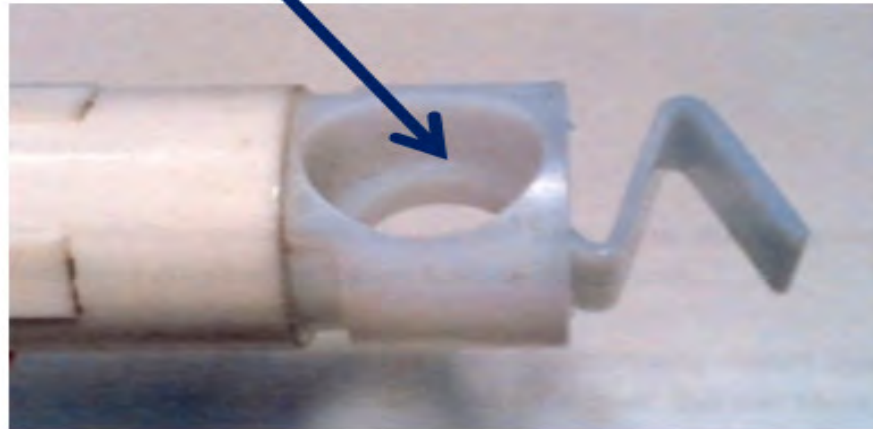


Fig1

Product of defendant:

Adapter member with a **stepped bore**



Alternative considerations

Alternatives in patent description

Alternative 1: Para [0012] describes that various bore types were known in the state of the art, such as stepped bores, through-hole bores or blind bores.

Alternative 2: Para [0049] explains that various bores types are available for the adapter member, such as stepped bores, through-hole bores or blind bores.

Alternatives during prosecution of patent (file history)

Alternative 3: In the published patent application, Claim 1 claims that the adapter member has an approximately cylindrical base body in which a radial blind bore or a stepped bore is formed for insertion on a gudgeon

Alternative 4: In the published patent application, the description mentions as bore types for the adapter member stepped bores, through-hole bores or blind bores.

V Case Study

Issue: whether the defendant product falls within the technical scope of the claimed invention in Japan?

- Literal infringement?
- Infringement under DOE?

1 Literal infringement

Question: How to interpret the “radial blind bore” of claim 1?

Considerations:

- A) The term “blind” in claim 1 indicates a non-through hole.
- B) A non-through hole is preferable considering the function of the adapter member disclosed in paragraph 0048.
- C) “Stepped bore” and “through-hole” are used separately .
- D) Dictionary definition.

Conclusion:

“Blind bore” of claim 1 means a non-through. **The defendant product does not constitute literal** infringement of the claimed invention.

2 Infringement under DOE

Question: Whether the adapter member with the “stepped bore” of defendant’s product is equivalent to the adapter member in claim 1.

Considerations:

- A) The 1st through 3rd requirements appear to be fulfilled.
- B) No information for the 4th requirement.
- C) The 5th requirement is satisfied as there is no “intentional exclusion.”
 - Claim 5 and para [0036] describe the bore types for the "reception bore," not for the adapter member.
 - These descriptions do not indicate that the patentee had recognized a stepped bore as a replacement for the blind bore of the adapter member.

Conclusion:

If the 4th requirements is fulfilled, DOE would be applied

Alternative 1: Para [0012] describes that various bore types were known in the state of the art, such as **stepped bores**, through-hole bores or **blind bores**.

Considerations:

A), B) are quoted from the main case.

C) Para [0012] does not mention that these bores are for the adapter member.

- **No intentional exclusion:** it is uncertain as to whether the patentee recognized a stepped bore as a replacement for the claimed invention indeed (“opinion 1”).
- **Intentional exclusion:** it is obvious for the person skilled in the art that the stepped bore is applicable to the adapter member (“opinion2”).

Conclusion:

If the opinion 1 is taken , DOE is **applied** so long as the 4th requirement is fulfilled. If the opinion 2 is taken, the application of DOE is **denied**.

Alternative 2: Para [0049] explains that various bores types are available for the adapter member, such as **stepped bores**, through-hole bores or **blind bores**.

Considerations:

A), B) are quoted from the main case.

C) The 5th requirement is not satisfied as it is a typical case for **intentional exclusion**.

It is objectively and visibly recognized that the patentee intentionally omitted the adapter having the stepped bore while recognizing the stepped bore as a replacement for the blind bore of the adapter member at the time of filing the patent.

Conclusion:

The application of DOE is **denied**.

Alternative 3: In the published patent application, Claim 1 claims that the adapter member has an approximately cylindrical base body in which a **radial blind bore** or a **stepped bore** is formed for insertion on a gudgeon.

Considerations:

A) is quoted from the main case.

B) The 5th requirement may not be satisfied.

- The description of the prior art alone does not infer the existence of "special circumstance."
- Depending on the patentee's action taken against the prior art during the patent prosecution, "intentional exclusion" may be recognized.

Conclusion:

DOE would not be applied for not fulfilling the 5th requirement.

Alternative 4: In the published patent application, the description mentions as bore types for the adapter member **stepped bores**, through-hole bores or **blind bores**.

Considerations:

- A) Is quoted from the main case.
- B) Is quoted from alternative 3.

Conclusion:

DOE would not be applied for not fulfilling the 5th requirement.

Summary

	Main	Alternative 1	Alternative 2	Alternative 3	Alternative 4
First Requirement	✓	✓	✓	✓	✓
Second Requirement	✓	✓	✓	✓	✓
Third Requirement	✓	✓	✓	✓	✓
Fourth Requirement	?	?	?	?	?
Fifth Requirement	✓	✓ or X	X	X	X

IV. Case Study “The blind bore”

- Claim

Claim provides two different bores:

- Seat assembly of a toilet seat has **a mounting link (40, 42)** with **a reception bore (44, 46)** which receives the dumping means (11, 12)
- Adapter member has a base body in which **a radial blind bore (24)** is formed for insertion on a gudgeon (26).

- Attacked embodiment

- Adapter member has **a stepped bore.**

- Initial scenario

- subclaim 5:

- reception bore (44, 46) [for receiving the damping means] can be a stepped bore or a through-hole bore

- description:

- para 36: like subclaim 5
 - para 48: Sufficient distance between the seat assembly and the ceramic body should be secured by means of the adapter member so that the seat and the seat cover can be rotated.

○ Initial scenario

– Claim construction:

- Blind bore generally means that there is no breaking through to the other side of the bore.
- However, the patent specification is “its own dictionary”.
- The function of the blind bore of the base body of the adapter member (20), into which the gudgeon (26) is to be inserted, is to secure a distance between the seat assembly and the ceramic body in order to allow rotation between the seat and the seat cover (see para 48).
- This function as a kind of counter-bearing is also achieved when the bore is a stepped bore like in the attacked embodiment.
- Whether other “reception” bore (44, 48) can be carried as a stepped bore or a through-hole bore like provided for in subclaim 5 does not matter since this is just another bore.

○ Alternative 1

– Claim construction:

- Not different from the initial scenario.
- Para 12 leaves it open which of the two bores mentioned in the claim is meant.
- Also in the initial scenario it can be assumed that the psa knew from his expert knowledge that there are different types of bores available.

○ Alternative 2

– Claim construction:

- In the description three variants of bores (stepped, through-hole and blind bores) are disclosed with regard to the adapter member (20).
- In the claim only one of these three variants (blind bore) is claimed.
- No infringement as to purposive claim construction and under the DoE since the patent applicant made a selection decision that only hinges with blind bores for insertion of the Gudgeons shall be protected.

○ Alternatives 3 and 4

- In the case law of the Bundesgerichtshof the issue whether published patent application could be taken into consideration has only been raised in the context of the third DoE question (selection decision) and always left open up to now since it was not relevant for the decision.
- Likewise this question does not have to be answered in order to decide alternatives 3 and 4.
- In the initial scenario and in alternative 1 the attacked embodiment infringes the patent as a matter of purposive construction.
- In alternative 2 the patent is infringed neither as a matter of purposive claim construction nor under the DoE.
- In all three scenarios there is no need to consider the published application in order to find out whether the applicant made a **selection decision** when inserting the requirement that a “blind bore” is formed in the base body of the adapter member for insertion on a gudgeon.