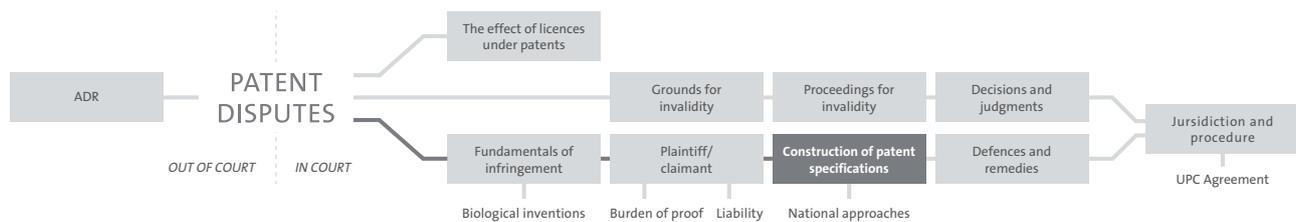


Construction of patent specifications

Essentials



Construction of the specification and claims

Article 69 European Patent Convention (“EPC”)

The starting point for the construction of the claims of a European patent is **Article 69(1) EPC**, which states:

“The extent of the protection conferred by a European patent or a European patent application shall be determined by the claims. Nevertheless, the description and drawings shall be used to interpret the claims.”

Protocol to Article 69 EPC

Guidance as to the correct interpretation of **Article 69** can be found in **Article 1** of the **Protocol on the Interpretation of Article 69**.

Under English law⁷, the well-established approach to the construction of patent claims is to ask what the skilled person would have understood the patentee to have used the language of the claim to mean. Whilst Article 69 says that the extent of protection conferred by a patent is determined by the claims, it goes on to say that the description and drawings are to be used to interpret the claims. Accordingly, the notional skilled person must construe the claims in the context of the specification as a whole.

Under German law, similar questions arise. The *Bundesgerichtshof* (German Federal Supreme Court) (BGH) clarified the general principles

“**Article 69** should not be interpreted as meaning that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims. Nor should it be taken to mean that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patent proprietor with a reasonable degree of legal certainty for third parties.”

Kirin Amgen v TKT [2005] RPC 9 at paragraph 69

⁷ The EPC and the UK Patents Act 1977 (as amended) apply equally to all parts of the United Kingdom. Jurisdictionally, however, the United Kingdom is divided into three parts: England and Wales, Scotland, and Northern Ireland. Proceedings in the Scottish courts differ markedly from those in the other jurisdictions.

of claim construction in five decisions rendered on the same day in 2002. According to these decisions, the relevant starting point is the meaning and wording of the patent claims as understood by the person skilled in the art. As under English law, the description and drawings must be used when interpreting the claims. The patent specification can even be its own lexicon for the interpretation of claims.

BGH, GRUR 2002, 515 – “Schneidmesser I”;
BGH, GRUR 2002, 519 – “Schneidmesser II”;
BGH, GRUR 2002, 511 – “Kunststoffrohrteil”;
BGH, GRUR 2002, 523 – “Custodiol I”;
BGH, GRUR 2002, 527 – “Custodiol II”.

BGH, GRUR 1999, 909 – “Spannschraube”

In addition, **Article 2 to the Protocol** states:

“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.”

This is discussed below in the section on the doctrine of equivalents.

Particular aspects of construction

Construction is a question of law and is not a matter for expert evidence. However, expert evidence may be given on the technical background or general technical understanding in the context of the claims and the specification. In some countries, such as the UK, expert evidence may also be given on the meaning of technical terms.

The aim of claim construction is to determine the true scope of the claims as they would have been read and understood by the skilled person at the relevant date. The claims must be construed without reference to either the alleged infringement or to any cited prior art. Accordingly, the scope of the claim should be the same for the purposes of assessing infringement and validity.

In the UK, there is no clear authority as to the date when the claims of the patent are to be construed, although the leading contender would appear to be the date of publication of the granted patent. It is likely that, at least in the UK, there may be different dates for consideration of inventive step (priority date), sufficiency (filing date) and construction (publication). In practice, differences in the dates upon which the patent is to be construed are unlikely to have a material effect on the interpretation.

The position on the date of construction varies across Europe. In Germany, for example, the relevant date for construction is the priority date (or, if no priority is claimed, the application date). The *Hoge Raad*, the Supreme Court of the Netherlands, has ruled that the perspective of the skilled person at the filing or priority date should serve as guidance.

Hoge Raad, the Supreme Court of the Netherlands 4 April 2014, NJ 2015, 11, *Abbott v Medinol*

Is there a doctrine of equivalence/equivalents?

Background

Under the doctrine of equivalents, the scope of protection of a patent is not based solely on the literal wording of the claims, but may be something outside the claims which performs substantially the same function in substantially the same way to obtain the same result. Under this doctrine, a defendant cannot make “immaterial variations” and by doing so avoid infringement.

Under Article 69 EPC, the extent of protection of a European patent is determined by the claims. As described above, **Article 2** to the Protocol on the Interpretation of Article 69 states that, when considering the scope of the claims of a European patent, “...*due account shall be taken of any element which is equivalent to an element specified in the claims.*”

The extent to which the doctrine of equivalents is relied upon as a guide to construction varies across Europe. The position in a number of European countries is set out below.

The approach of national courts

UK and Ireland

In the UK, following the decisions of the House of Lords in *Catnic* and *Kirin-Amgen*, the courts adopt a purposive approach to construction, the key question being what the skilled person would understand the patentee to be using the language of the claim to mean. This approach is similar to that adopted for interpreting commercial documents in general.

The role that equivalents play in claim construction was considered in the *Improver* case. When considering whether a feature embodied in an alleged infringement that fell **outside** the literal wording of the claim (‘a variant’) was nonetheless **within** the language of the claim as properly construed, the Court should ask itself the following questions:

- “(1) Does the variant have a material effect upon the way the invention works? If yes, the variant is outside the claim. If no?*
- (2) Would this (i.e. that the variant had no material effect) have been obvious at the date of publication of the patent to a reader skilled in the art? If no, the variant is outside the claim. If yes?*
- (3) Would the reader skilled in the art nevertheless have understood from the language of the claim that the patentee intended that strict compliance with the primary meaning was an essential requirement of the invention? If yes, the variant is outside the claim.”*

Per Arnold J, *Actavis v Lilly* [2014] EWHC 1511 (Pat) at paragraph 100

These questions are referred to as the *Improver* or *Protocol* questions and were routinely relied on prior to the *Kirin-Amgen* case. They are, however, only guidelines and not legal rules. They have now rather fallen out of fashion and have rarely been referred to in UK court judgments in the last 10 years. Nonetheless, the *Improver* questions remain part of UK law and continue to provide a means by which ‘equivalents’ may be considered in assessing claim construction.

These explanations refer to cases in which **only one means** of claim is not literally reproduced. However, they also apply when the differences relate to several means.

France

As explained above, the assessment of equivalence in determining infringement is of major importance in France.

Infringement by equivalence is deemed to exist if means which are not identical to those of the claimed means in their form or structure nevertheless perform the same function to achieve the same results. However, the doctrine of equivalence will only be applied if it has been ascertained that the function of the claimed means is novel.

The test for infringement by equivalence is therefore three-fold:

- Does the essential means of the patent whose form is not reproduced in the means at issue perform a novel function?
- If so, do the alleged infringing means nevertheless perform the same function?
- If so, does the accused means produce the same results?

Tests as to whether it would be obvious to the skilled person that the means at issue were equivalent or as to the intention of the patentee are not applied in France.

The claimed means at issue must perform a novel function

The doctrine of equivalence is not necessary if the function is claimed per se, because in such a case, any means which performs this function will be held to infringe, whatever its structure may be. In this case, the infringement is literal.

As a result, the doctrine of equivalence is relevant only for claims which protect one or more means characterised at least partly by its/their form or structure.

For these claims, the doctrine of equivalence applies only if the claimed means at issue performs a novel function.

In other words:

- If the function of the claimed means at issue is known in the prior art, then the scope of the claim is limited to the claimed structure (and its minor variants). In this case, the claim is said to cover “*moyen particulier*,” (specific means), and infringement by equivalence cannot apply.
- If the function of the claimed means at issue is novel, the scope of the claim extends to structures performing the same function for the same results: in this case the claim is said to cover “*moyen general*,” (general means), and the doctrine of equivalence can apply.

So the key question to be addressed when assessing whether infringement by equivalence can apply is the contribution of the invention to the art.

This is illustrated by the following decisions.

In a decision of 16 April 2013 (*Cycles Lapierre v Decathlon*), the *Cour de Cassation* (French Supreme Court) (*CCass*), commercial chamber, held that the appeal judges did not need to determine whether the allegedly infringing means were equivalent to the claimed means because they had previously found that the claimed combination of means differed from the prior art by their form but not by their function, which was not new.

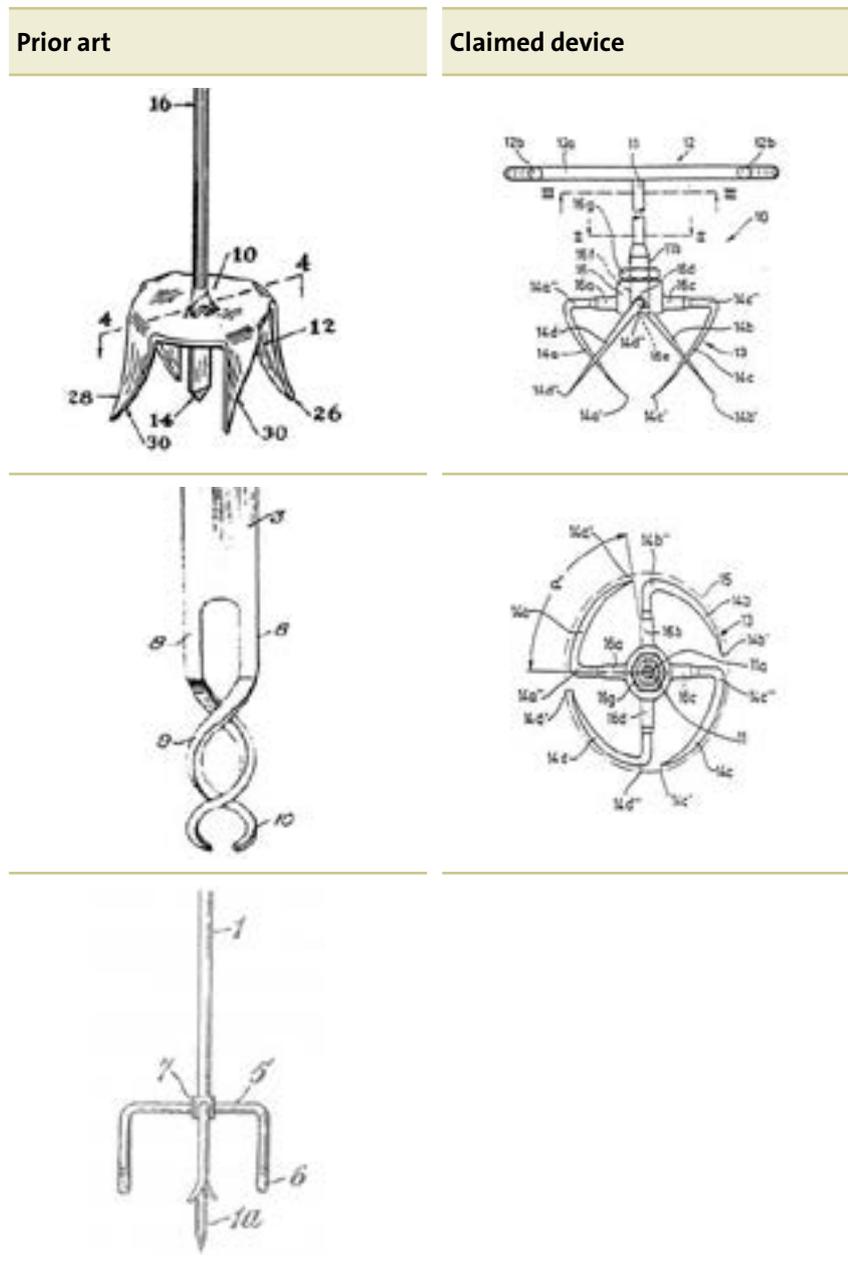
Likewise, the *Cour d’appel (CA) de Paris* (Paris Court of Appeal), in a decision of 26 September 2012 (*Beaba v Seb France*) held that infringement by equivalence was excluded since the claimed cooking device was novel only as a result of the combination of its structural features.

The same approach was followed by a decision of the Paris Court of Appeal of 17 June 2011 (*Salomon v Merrell and Wolverine*), which held that the claimed shoe device could be protected only in the form defined by the claim because the function performed by the device was not novel.

These decisions are consistent with well-established French case law.

In the example of the gardening device shown here, the question of whether the claimed means (and, in particular, the tines at an angle of 90° to the axis) had a novel function led the court to study the prior art cited by the alleged infringer in order to assess whether this specific angle of 90° amounted merely to a structural difference or whether it in fact represented a functional difference over the prior art.

The drawings below show the claimed device and three gardening tools of the prior art:



Dossiers Brevets
1993, I, 2

The court considered that the function of the 90° angle in the claimed device, i.e. permitting rotation like a screw in the soil, and loosening the soil, was not disclosed in prior art.

Therefore, the function of the claimed device, and hence the role of the 90° angle, was novel.

When a claimed feature, which is not literally reproduced, performs a new function, the judges have to move to the next part of the test, to determine whether the accused means nevertheless performs the same function.

The accused means must perform the same function

Two means perform the same function when they produce the same primary technical effect.

The “*primary technical effect*” can be defined as the effect directly and immediately produced by the implementation of the means.

It must not be confused with the result, which is the advantage provided by the means.

This distinction between function and result was particularly well explained in a decision of the *Ccass, chambre commerciale*, of the 26 January 1993 in a case involving a patent for a process for making doxycycline through hydrogenation of methacycline, using a modified catalyst.

The alleged infringer argued that the function of the process was to reduce, through hydrogenation, methacycline into doxycycline, which was not novel; the patentee argued that the function of the process was rather to obtain selectivity and stereospecificity at almost 100% of the required epimer (a), which was novel.

The *Ccass* affirmed the judgment of the CA Paris which had decided that the production of a very high yield of epimer a was a novel function, not a result. As the process carried out by the defendant involved not only the known result of reduction through hydrogenation of methacycline into doxycycline, but also the novel function of selectivity and stereospecificity to yield epimer a, the defendant was found to infringe the patent. In the example of the gardening device, the question whether the accused device performs the same function to achieve the same result led the court to a finding of non-infringement. It considered that the tines of the accused device did not perform the same function as those of the claimed device because they did not achieve the screw effect on insertion into the soil: the accused device had to be introduced in the soil using a vertical pressure applied by the foot.

If, however, the accused means do perform the same function as the claimed means at issue, then it is necessary to determine whether, in fact, they achieve the same result.

Tribunal de Grande Instance (TGI), Regional Court of Paris, 3rd chamber, 1st section, 3 April 2014 (Équipement pour l'environnement v Rabaud), and TGI Paris, 3rd chamber, 3rd section, 22 November 2013, (Manitou v Haulotte)

For example, the decision of the TGI Paris, of 29 September 2004 (*L'Oréal v Al Khouri*) recalled that obviousness is not taken into account:

“That it does not matter much, concerning the discussion on the infringement, that the skilled person can replace – based on Mr Al Khouri’s patent – the alkyl monomers by polymers, since this criterion is only relevant, as pointed out by the defendants, for assessing the inventive step of a patent and therefore its validity and not for deciding whether there is an infringement or not;”

The accused means must achieve the same result

Until recently, French case law considered that the result obtained by the means at issue had to be similar, without necessarily being identical. As a consequence, the result could be of a different quality (less perfect, or higher or poorer yields) or of a different degree than the result obtained by the patented means.

A recent example of infringing improvement is provided by the decision of the TGI Paris, 3rd chamber, 3rd section, of 22 November 2013 (*Manitou v Haulotte*).

However, some recent decisions indicate that the result should be of *“the same nature and of identical quality and efficacy”*.

Irrelevant factors (obviousness and the intention of the patentee)

The question of whether the accused means would have been obvious to the skilled person is not relevant to the assessment of infringement by equivalence under French law. In fact, an improvement of the claimed means may still be an infringement.

This position used to be summed up in the formula: *“improving is infringing”*.

However, this does not mean that any improvement of a claim would necessarily be an infringement: it only means that an improvement will not automatically avoid infringement and that the infringement test must be applied as usual.

Lastly, equivalence is assessed in a purely objective manner, so that intentions of the patentee are not relevant. However, when the patent explicitly and unambiguously excludes a variant from its scope, this variant, if exploited by a third party, will not be held equivalent to the patented invention.

In the same way, when the variant directly and unambiguously goes against the teachings of the patent, it will not be held equivalent.

Germany

The doctrine of equivalence has long been recognised under German law. Today, Germany has well-established case law which defines this extended scope of protection and provides detailed guidance on whether or not an embodiment falls within the scope of protection as an equivalent infringement.

The basic test was set by the five decisions of the BGH already cited in the context of claim interpretation in 2002. According to these decisions, a three-step test must be applied:

First, the court must consider whether the variant objectively has the same technical effect for the solution of the problem addressed in the patent. Other effects which are connected with the use of the alternative means are irrelevant if the patent itself does not consider or evaluate such effects. The application of this criterion requires a careful interpretation of the feature in question.

Second, the court should ask whether, at the priority date, the skilled person using the common general knowledge would have been able to discover the variant. In other words, it has to examine whether the variant, when compared with the claimed feature, is inventive and not within the general knowledge of the person skilled in the art. If that is the case, an equivalent infringement will be excluded.

The third question is, are the considerations applied by the skilled person drawn from the technical teaching of the patent claim (so that the person skilled in the art took the modified embodiment into account as being an equivalent solution)?

This third requirement is usually the most difficult, as it requires an assessment of the closeness of the solution protected by the patent and the variant. In the context of this third requirement, the BGH significantly limited the scope of the doctrine of equivalence in two decisions handed down in 2011.

BGH, GRUR 2011, 701 –
“Okklusionsvorrichtung”;

BGH, GRUR 2012, 45 –
“Diglycidverbindung”

In these decisions, the court held that an infringement by equivalence will be excluded if the reader of the specification has to conclude that – for whatever reason – the variant is not intended to be protected by the claim after reading the patent as a whole. This is particularly the case if the specification discloses several embodiments but only one of them is protected by the wording of the claim. In this case, an infringement by equivalence is excluded. Such an exclusion may even be present if the description refers to a specific embodiment in the prior art which, again, is not covered by the meaning of the patent wording.

OLG Düsseldorf, I-2 U 22/10 –
“Regenschirm”

Further problems can arise if the claim was amended during opposition, in particular if the variant is not explicitly disclosed as an alternative embodiment in the description, but can be deduced from the description and general references to prior art in the description. The court must assess such matters on a case-by-case basis. The BGH also ruled that features with a numeric content cannot be interpreted beyond their literal meaning and that in such cases there is no scope for the doctrine of equivalence.

OLG Düsseldorf, I-2 U 24/13 –
“Drosiprenon”

BGH, GRUR 2002, 515 –
“Schneidmesser I”

Finally, the court will ask whether the variant is anticipated or obvious in light of the art. This last factor, known as the **Formstein** objection, prevents the extension of the patent’s scope to matter which would have

BGH, GRUR 1986, 803 –
“Formstein”

been non-novel or obvious at the time of patenting. This requirement is a deviation from the bifurcated German system. It compensates for the extension of the scope of protection to variants not covered by the literal meaning of the words of the claims.

Netherlands

The Dutch courts favour the “function-way-result” test for equivalence. According to this test, a variant is to be considered equivalent to the claim insofar as it employs measures which perform essentially the same function, in essentially the same way, and with essentially the same result.

Hoge Raad, the Supreme Court of the Netherlands, 12 November 2004 – *Impro v Liko*

Furthermore, the *Rechtbank’s-Gravenhage*, the Hague Court of Appeal, has ruled that an embodiment will not fall within the doctrine of equivalents if it is an inventive advance over the claims. In addition to the function-way-result test, an “insubstantial difference” test is also recognised.

In recent decisions, the *Hoge Raad* has also held that embodiments disclosed but not claimed are disclaimed. This is particularly important for divisional applications which cover the variant. Such applications are regarded as an indication that the variant is disclaimed for the patent under which equivalent infringement is invoked.

E.g. *Hoge Raad*, 25 May 2012 – *AGA – Occlutec*; *Rechtbank ‘s-Gravenhage*, 31 December 2013 – *Bayer v Sandoz*

Conflicting authorities exist as to whether equivalence is assessed at a fixed date (e.g. the priority date) or from the date of infringement.

Is there a doctrine of file wrapper estoppel?

Background

Under the doctrine of prosecution history (or “file wrapper”) estoppel, a statement made by the patentee during the prosecution of the patent concerning construction is binding on the patentee thereafter. In other words, in subsequent court proceedings, a patentee may not argue a claim construction different to that which he argued before the patent office.

The extent to which prosecution history estoppel exists in national court proceedings across Europe, and its advantages and disadvantages, are discussed below.

Arguments in favour of prosecution history estoppel

File wrapper estoppel plays a particularly important role in those jurisdictions where the doctrine of equivalents is relied on, and acts as

Festo Corp v Shoketsu Kinzoku Kogyo Kabushiki Co. 535 U.S. 722, 727 (2002)

a means to obviate the “*substantial uncertainty about where the patent monopoly ends [caused by equivalence].*”

Additionally, the courts have remarked that referring to the file wrapper may prevent abuse of the system by patentees “*accepting narrow claims during prosecution and then arguing for a broad construction of those claims for the purpose of infringement.*”

Actavis UK Ltd & Ors v Eli Lilly & Company
[2014] EWHC 1511 (Pat) at [111]

Arguments against prosecution history estoppel

Opponents of prosecution history estoppel argue that neither Article 69 EPC nor the corresponding Protocol specify that the prosecution history is to be considered in construing the claims.

Equally importantly, opponents argue that the doctrine can lead to courts and lawyers having to look through hundreds of pages of correspondence between the patentee, the patent office and third parties, often in an unfamiliar language. This task can give rise to an undue burden and expense in patent proceedings.

Supporters of the doctrine frequently observe that litigators often review the prosecution history in detail anyway, so no additional burden is caused by making these documents admissible in the proceedings.

The approach of national courts

UK and Ireland

The UK has never had a doctrine of prosecution history estoppel. The English courts do not actually prohibit inspection of the prosecution history, but the general position is that such inspection is discouraged. In a recent case, it was held that the court may refer to communications between the applicant and the patent office as an aid to construing a claim. Such reference is considered especially appropriate when it is “*short, simple and shows clearly why the claims are expressed in the manner in which they are to be found in the granted patent and not in some broader manner.*” Prosecution history is, however, sometimes used for cross-examination of a witness.

Per Arnold J, *Actavis UK Ltd & Ors v Eli Lilly & Company* [2014] EWHC 1511 (Pat) at [108]

Per Lord Hoffmann, *Kirin-Amgen Inc & Ors v Hoechst Marion Roussel Ltd & Ors* [2004] UKHL 46 at [35]

Actavis UK Ltd & Ors v Eli Lilly & Company
[2014] EWHC 1511 (Pat) at [111]

France

Under French law, there is no doctrine of prosecution history estoppel as such. However, the court may look to a patentee’s representations to the patent office. Such consideration is not necessarily limited to cases where the patentee attempts to argue for the expansion of the scope of the claims via equivalence.

Germany

German courts have rejected the doctrine of prosecution history estoppel. Only in the event of a clear waiver, statements made in patent prosecution or nullity actions can be held against the patent owner. The latter also is limited to the party which is conducting the cancellation action. German courts may consult prosecution history as a guide to construing the claims, though this is generally applied very restrictively.

BGH, 22 December 2006, NJ 2008, 538 –
“Dijkstra v Saier”

Netherlands

There is no doctrine of file wrapper estoppel as such in the Netherlands. *Hoge Raad* case law has established that a court may look to the file wrapper in construing a claim, but may only do so in favour of the patentee where the scope of the claim seems ambiguous. This restrictive approach does not apply where a third party relies on the file wrapper to determine the scope of the claims.

Scandinavia

The courts of the Scandinavian countries have been comparatively open to referring to prosecution history as an aid in assessing construction. Indeed, the preparatory document for the joint Nordic patent legislation expressly states that prosecution documents may be relevant to claim interpretation.

NU 1963:
6 p. 186.

Matters not to be taken into account on construction

Expert evidence on the construction of the claims

It is not for the experts to make decisions for the court (for example, whether the allegedly infringing product does indeed fall within the scope of the claims, or whether the patented invention is obvious having regard to the prior art). Their main function is to educate the court in the technology relevant to the subject-matter of the dispute and in matters relevant to the state of the art.

In practice, party-appointed experts are often asked to provide their opinion on questions which are properly for the court to determine. The expert's personal view will not be all that helpful for the court. What may be of considerably more assistance are the reasons for this view. The court can then consider these reasons when forming its own conclusion as to the construction of the claims.

The actual intention of the inventor

The task of claim construction is not to find out or to form a view as to what the inventor actually intended the words of the claim to mean. It is the claims themselves that, according to **Article 69(1) EPC**, determine

the extent of protection. Furthermore, the **Protocol to Article 69** expressly prohibits such an approach:

“Nor should [Article 69] be taken to mean that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated.”

Instead, a purposive, contextual approach is taken to claim construction. Under the English approach, the question to be asked is: What would the skilled person have understood the patentee to have used the language of the claim to mean? However, this is not asking the court to ascertain the inventor’s actual intention, but rather to ascertain what the notional skilled person would have understood the patentee to have meant.

The knowledge/intention of the defendant (for direct infringement)

Patents confer monopoly rights. The basic principle is that the intention of the defendant is irrelevant when it comes to determining whether the acts committed by him directly infringe a patent.

For example, if the patent is for a product, disposing of that product will infringe the patent, regardless of the defendant’s knowledge. Likewise, where the patent is for a process, using the process, or disposing of a product obtained directly by means of that process, will infringe the patent, regardless of the defendant’s knowledge.

The defendant’s knowledge is relevant in respect of process inventions, where the alleged infringement is the offering of the process for use, and in respect of indirect infringement of a patent. In the case of process inventions, offering a process for use in the territory in which the patent is in force will only amount to an infringement if the alleged infringer knows, or it is obvious to a reasonable person in the circumstances, that its use there without the consent of the proprietor would be an infringement of the patent. The knowledge test is accordingly both subjective and objective: the defendant will not be able to avoid infringement by showing that he himself did not have the requisite knowledge, if the infringement would have been obvious to a reasonable person in the same circumstances.

Similarly, there are both subjective and objective elements to the assessment of indirect infringement. The person supplying or offering to supply means (relating to an essential element of the invention) for putting the invention into effect must know that those means are suitable for putting, and are intended to put, the invention into effect. Alternatively, this must be obvious to a reasonable person in the circumstances.

No *contra preferentem* rule against patentee

There is no *contra preferentem* rule in claim construction. The claims are not to be given the narrowest possible scope consistent with their language. Neither are they to be given the broadest possible scope. As explained in more detail above, the claims are to be given a purposive, contextual interpretation.

Claims not usually narrowed by reference to examples in the specification

The description and figures of a patent are used to interpret the claims, but it does not follow that the claims are to be limited to the particular examples provided in the description or the embodiments shown in the figures. Very unusually, the European Patent Office may allow a claim to be granted which does contain a specific reference to a figure or example. This may be done, for example, where it is not practical or possible to succinctly express the configuration that the patentee wishes to protect in words. In such circumstances, the figure referred to should of course be taken into account when construing the claim.

It is normal practice for claims to contain reference signs relating to features in the figures in the patent. As is made clear by **Rule 43(7) EPC**, the purpose of these reference signs is to increase the intelligibility of the claims. They are not to be construed as limiting the claims.