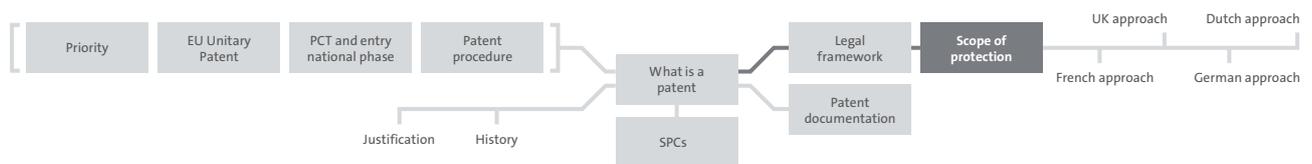


Scope of protection

Essentials: SoP



Introduction

A patent is an *intangible* property right. The abstract nature of this right makes the application of a traditional legal analysis of property somewhat difficult. In cases concerning *tangible* property there is rarely, if ever, the need to enter into complex debate about the boundaries of the property concerned. It may be that the rights affected need some clarification, but in general boundaries are clear or can be relatively easily determined.

This is not the case with patents. A patent may be said to provide legitimate protection to an “inventive idea” or the “subject-matter” that lies behind an invention. This is quite often wider than the projection or expression of the idea in real space, and, given its abstract nature, the only sensible way in which this “matter” can be contained is to pin it down in words. The required method of doing this is to draft a series of *claims* following a descriptive specification of the invention and, where necessary, to include drawings. It is the job of the claim drafter to effectively enclose the invention without straying into the prior art and without overly stretching the claim to encompass things that the inventor has not actually invented, or not described.

Claims define the invention

Claims are carefully worded sentences that serve to define the invention. They provide the means for the public, i.e. the interested reader of a patent (and the courts), to understand and visualise what the patentee has marked out as his invention, and therefore what invention is claimed as his exclusive property. Claims are not evidence of a contractual agreement; they are a unilateral statement of definition in the words of the inventor.

Claims are, accordingly, critical when it comes to:

- (a) determining the scope of the protection granted, and
- (b) establishing the validity of a patent.

There are two approaches concerning the role that a patent's claims will play when determining the scope of a patent. The names given to these positions are "peripheral definition theory" and "central definition theory".

Peripheral definition: Under the peripheral definition approach, claims define the outer boundaries or limits of protection. They form the linguistic equivalent of "fence posts" and enclose the patentee's exclusive territory, marking its outer limits. The major advantage of this approach is that the scope of protection will be relatively clear to any third party reading the patent, thereby providing certainty to the grant.

Central definition: Under the central definition approach, the scope of protection is determined by finding the principle underlying the invention (the "inventive idea") by looking at the teaching in the specification as a whole. The claims are treated merely as sign posts; for while they may be the starting point for the assessment, the courts are not strictly bound by their actual wording. Under this theory, patent scope is established based upon the inventor's contribution to the art. The central definition approach has the advantage of providing a flexible degree of protection for the patentee. However, it may also be seen to suffer in terms of certainty when compared with the alternative interpretative theory.

Summary of requirements under the EPC

Under the EPC, the claims define the invention (**Article 84 EPC**). They are also used to determine the patent's scope of protection (**Article 69 EPC**).

Claims are written in peripheral style – separating what is old and obvious (which by definition must be outside of the patentee's exclusive territory) from that which is new and inventive.

The claims must be interpreted in light of the description and also the drawings (**Article 69 EPC**). It is not permissible to merely look at the dictionary definition of a word; the word must be interpreted in the context in which it is used. However, the claims should not be used merely as guidelines – they must play a determinative part in deciding on the patent's scope.

Equivalents

In deciding whether something falls within the scope of a claim, due account should also be taken of any element which is equivalent to an element specified in the claims. However, exactly how this is to be interpreted, and the significance or weight that is to be attached to such equivalents, is far from certain, as we shall see. In all cases, the reader of the patent is deemed to be “the skilled reader” (see below).

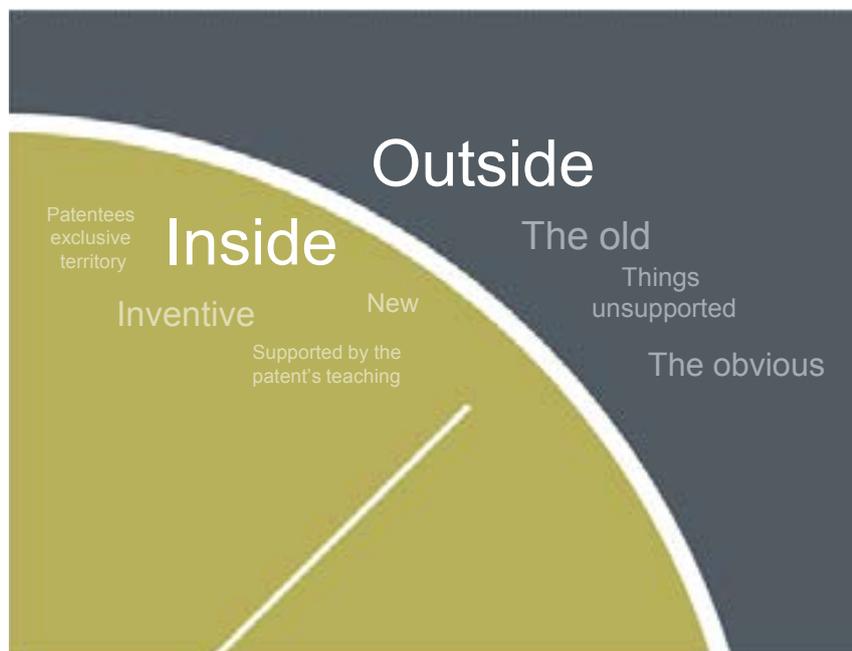
Article 84 EPC Claims

The claims shall define the matter for which protection is sought. They shall be clear and concise and be supported by the description.

Article 69 EPC Extent of protection

(1) 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.

(2) For the period up to grant of the European patent, the extent of the protection conferred by the European patent application shall be determined by the claims contained in the application as published. However, the European patent as granted or as amended in opposition, limitation or revocation proceedings shall determine retroactively the protection conferred by the application, in so far as such protection is not thereby extended.



Putting claim construction into practice: some fundamentals

The construction of patent claims normally involves determining the contextual meaning of ordinary words of a language, for whatever reason. This is a question of law **not** fact. It is accordingly **not** a question for an expert, but one for a judge. There is an exception to this, however. Expert evidence may legitimately be given on the meaning of technical words in the context of the specification.

The claims are constructed by looking through the eyes of the notional addressee, i.e. the **person skilled in the art** (see below). In the context of claim construction, it is therefore not permissible for a judge (or indeed anyone else) to ask “what does this claim mean to me?” The correct question is to ask what the skilled addressee would consider the words in the claim to mean. Claims are therefore read against the addressee’s background knowledge, in other words **the common general knowledge of the art**.

Moreover, the scope of the claim should be interpreted without reference to the alleged infringement or to any prior art.

The EPC does not govern issues of infringement, which is determined in accordance with national law. Accordingly, under the EPC there is no set date at which the claims must be interpreted for the purpose of infringement proceedings. There is, as yet, no consistent approach that has been adopted across the member states. Indeed, different courts within some states have construed the scope of the claims as of different times in different cases. Obviously, the date at which the claims are construed could have significant repercussions on their scope, and this unharmonised approach is therefore open to criticism. The following dates have been used:

The priority date: *Schneidmesser I* (German Supreme Court) (2002) 33 IIC 873.

The filing date: *Biogen v Medeva* (UK House of Lords) [1997] RPC 1.

The publication date: *Catnic Components v Hill & Smith* (UK House of Lords) [1982] RPC 183 – in fact, this is the generally accepted date of interpretation in the UK.

The date of infringement is also sometimes used in certain states.

The person skilled in the art or the “skilled addressee”

The person skilled in the art is referred to in a number of places within the EPC. For example, **Article 56** declares that an invention is to be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art. **Article 83**, concerning sufficiency of disclosure, and Article 69 (extent of protection) also refer to this notional individual. However, the importance of this “skilled addressee” is far broader.

The notional person skilled in the art is a legal fiction intended to assist in the objective interpretation of the claims, as well as to provide objectivity when considering other matters of patent law. For example, when considering whether an invention is new, the prior art must be viewed through the eyes of the skilled addressee. Equally, the viewpoint of the skilled person must be used to assess whether an amendment to the claims or specification is impermissible as “adding matter”.

In fact, the role of this judicial construct is central to patent law.

Article 56 EPC Inventive step

An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art. If the state of the art also includes documents within the meaning of Article 54, paragraph 3, these documents shall not be considered in deciding whether there has been an inventive step.

Article 83 EPC Disclosure of the invention

The European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The person skilled in the art: some fundamental criteria

The level of skill that the person skilled in the art is deemed to possess will, obviously, be linked to the specific patent in question, i.e. it will be dependent upon the art. The skilled addressee of a mechanical invention will not be the same as that for one in the field of biotechnology. However, the level of skill possessed by the addressee will be the same for all purposes related to the particular patent.

Given that we are considering the mind of a notional person skilled in the art, we must inevitably attempt to determine the broader context too. What information would he accept without question? What would he reject out of hand? What are his prejudices? This inevitably entails considering the common general knowledge of the art.

In approaching construction, it is therefore essential to answer a number of questions:

- Who is the person skilled in the art in respect of this particular invention?
- What is his common general knowledge?

The art can be ascertained by examination of the patent. As general considerations, the skilled person:

- Can comprise a team of individuals with different qualifications depending on the technology in question.
- Is not generally of exceptional skill or knowledge – i.e. is not generally at the top of his profession. But, depending again on the technology involved, a postgraduate degree might be needed.
- Has carefully read all of the literature – and has an unlimited capacity for absorbing the relevant literature.
- Possesses the common general knowledge in the field/art in question.
- Can carry out simple trial-and-error experiments, but cannot be required to engage in a research programme.
- Is definitely not inventive.

The common general knowledge: some fundamental criteria

The “common general knowledge” of an art is a shorthand way of referring to the knowledge which is widely known and generally regarded as a good basis for further action by the bulk of those engaged in the art to which the invention relates. It has been described as the skilled worker’s toolbox. It must be distinguished from what is known as the “state of the art”.

It will include those things that the skilled person knows exists and which he would refer to as a matter of course if he could not actually remember them and which he generally understands are sufficiently reliable to use as a foundation for further work. However, it is not everything that would turn up in a literature search.

It also includes any commonly held prejudice of the trade (e.g. that something would definitely not work, or that a particular way of doing things is absolutely the best way of doing something). In *Dyson v Hoover*, [2001] EWCA Civ 1440, the court considered that the vacuum cleaner industry’s fixation on cleaners with disposable dust bags set the notional skilled addressee’s mental horizon, making a true inventor of the individual who was able to lift his eyes above the horizon and envisage a bag-free machine. Common general knowledge may occasionally include the contents of very well-known patent specifications.

Proving the common general knowledge

Common general knowledge is proved at trial as a question of fact. Accordingly, expert evidence is available to determine what the common general knowledge was at a relevant time. However, care must be taken in this respect: just because something was known to a particular witness does not automatically mean it is part of the common general knowledge. Equally, just because something is recorded in a particular document does not automatically make it common general knowledge, even if the document is widely read. A piece of knowledge only becomes general knowledge when it is generally known and accepted without question by the bulk of those who are engaged in the particular art, in other words, when it becomes part of their common stock of knowledge relating to the art.

T 890/02 BAYER/Chimeric Gene explains that the common general knowledge is normally to be found within encyclopaedias, handbooks and dictionaries on the subject in question, but that such knowledge is clearly distinct from the state of the art as a whole. Knowledge only becomes common general knowledge when it is included in general or specialised handbooks or in encyclopaedias after being accepted, integrated and shared by the scientific community.

T 890/02 (Chimeric gene/Bayer)

Summary

The person skilled in the art is a legal fiction designed to provide a degree of objectivity when it comes to assessing issues in various areas of patent law, including claim construction/determination of scope, assessment of inventive step and sufficiency.

The skilled addressee is not a real person, and may be a composite team of people with various skills. They are interested in the field(s) of the invention and can make simple trial-and-error experiments to overcome difficulties in the disclosure/prior art where it would be obvious to do so. However, they are assumed to possess no inventive capacity.

The skilled person possesses the common general knowledge of the art – things known and accepted without question by the majority of those in it. The common general knowledge may determine how the addressee approaches the solution to a technical problem, the invention or the prior art, and may determine whether a particular avenue of progress is likely or not.

A doctrine of equivalents? A vexed question

An equivalent may be defined as a variant understood to be functionally identical to an integer in a claim yet falling outside of its literal meaning. Examples could include claims referring to a compound containing a group II metal and an infringer using manganese (a non-group II metal, but one having equivalent properties in certain contexts) instead, or claims referring to loose ends secured with a clamp, and an infringer choosing to secure them by means of a weld.

Whether the substitution of a claimed integer for equivalent means properly falls within the scope of the patent is a vexed question. Some states (Germany and France, for example) see the protection of equivalents as integral to the concept of providing the patentee with fair protection. Others, such as the UK, deny that there is any room within Article 69 EPC for equivalents to extend protection outside of the claim; the claim uses words of the patentee's own choosing.

Equivalents under the EPC

The lack of harmonisation on the matter of equivalents prompted the EPC Drafting Committee to propose a new Article 2 for the Protocol on the Interpretation of **Article 69 EPC** when the Convention was amended in November 2000. The delegates at the Munich Conference therefore accepted the inclusion of the following words into the Protocol:

"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."

One may be forgiven for thinking that such a statement would be read as mandating the adoption of an EPC doctrine of equivalents. However, this is not the way in which the UK courts have interpreted it. Lord Hoffmann in *Kirin-Amgen* (UK House of Lords) [2005] RPC 9 held that there could be no doctrine of equivalents under the EPC. All that Article 2 of the new Protocol could require was that equivalents could *"be an important part of the background of facts known to the skilled man which would affect what he understood the claims to mean"*.

Article 69 EPC

Extent of protection

(1) 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.

(2) For the period up to grant of the European patent, the extent of the protection conferred by the European patent application shall be determined by the claims contained in the application as published. However, the European patent as granted or as amended in opposition, limitation or revocation proceedings shall determine retroactively the protection conferred by the application, in so far as such protection is not thereby extended.

File wrapper estoppel

File wrapper estoppel is a US term used to describe the attempted use of the prosecution history as recorded in the file at a patent office to constrain the interpretation that may be placed on a patent's claims following grant. In essence, it means that a patentee is estopped from, say, arguing for a broad interpretation of a claim so as to reclaim subject-matter surrendered during prosecution in an attempt to secure the grant. In other words, the patentee is tied to any promises or concessions made and recorded during prosecution of the patent.

There is still no harmonised approach mandated by the EPC. Indeed, the text of the EPC does not mention the term “file wrapper estoppel”. Some states insist that such a doctrine be utilised and others disavow its relevance under the EPC. No clear picture emerges.

Arguments for and against file wrapper estoppel

Arguments in favour of this doctrine include:

- The prosecution file relates to the claims at issue and is therefore clearly relevant.
- In practice, the file is always consulted by the patent attorney when prosecuting.

Arguments against include:

- Article 69 EPC and the Protocol are silent on the doctrine.
- Despite being put forward at the Munich Conference, a provision designed to include file wrapper estoppel was rejected.
- Life is too short to trace the file and consult it as a matter of course.
- Legal certainty would favour not looking at the file.
- The expense of requiring an interested member of the public to consult the prosecution file whenever a question of scope of protection arises would be totally disproportionate to its utility. Often the file would require translation in such circumstances.

File wrapper estoppel: national practice

As noted, there is no harmonised position. States are free to make up their own minds as to the relevance (or otherwise) of the file wrapper. Accordingly, varying practice can be seen across the EPC contracting states.

- The Dutch position is that the file is relevant and may always be read.
- The German position is the opposite – Article 69 EPC and the Protocol do not mention it and therefore it is not relevant to construction. However, the 2011 Federal Supreme Court judgments *Occlusion Device* (2011) 42 IIC 851 and *Polymer Foam* (X ZR 117/11) have added that it is an open question whether patent publications such as the officially published patent application or earlier versions of the patent (which have been modified for instance in opposition proceedings) might be relevant to claim construction: differences between the content of earlier publications and the final patent might help in construing the claims of the final patent.
- The English and French sit somewhere in-between. The English courts generally do not look at the file (and indeed, when asked, usually state that it is not appropriate to do so) but nevertheless will concede to examining it where it is really necessary to do so in order to construe the claim – per *Walker LJ* in [2001] EWCA Civ 1589.

The French position is that no such doctrine exists, but that consideration of the file may be persuasive in some cases.