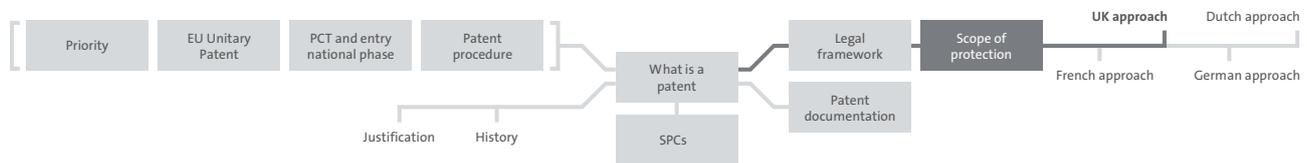

The UK approach (Supplementary reading)



Claims and the scope of protection under the EPC – history

Before the adoption of the EPC, some European states (e.g. the UK and Switzerland) applied “peripheral claiming”, while others (e.g. Germany and the Netherlands) applied “central claiming”. In the UK, therefore, claims served both to define the invention and to demarcate or limit its extent (“what is not claimed is disclaimed”). In Germany, on the other hand, they only defined the invention. The scope of protection was determined by generalisation of the inventive concept, and this was largely unaffected by the exact words used in the claims. Claims were treated as a starting point or point of departure (“*Ausgangspunkt*”).

Traditions of claim construction were also different between the “peripheral” states and the “central” states. In the former, claims were treated more strictly. Their wording was critical to the extent of patent protection (on the basis that the patentee had chosen the words in question and should therefore be limited to them). In the latter, the actual words of the claims were less important – protection could even be given to things falling far from the claims, as long as they would have been obvious to the skilled person reading the patent. This potentially extended protection was given on the basis that the inventor should be able to reap his reward to the extent that the invention genuinely contributed to the art.

1977: Changes wrought by the EPC – Article 69 EPC

With the passage of the EPC, a harmonised approach to the treatment of patent claims was adopted by the contracting states. This was brought about by Article 69 EPC, which (in its original wording) stated:

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

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.

"Peripheral" claiming had won the day. Unfortunately, however, the exact wording of Article 69 EPC varied slightly in translation between each of the official texts of the EPC – i.e. the English, German and French ("*terms of the claims*" v "*Inhalt der Patentansprüche*" v "*teneur des revendications*" respectively). As one commentator noted at the time, "it is very unfortunate that this divergence between the ... texts should coincide with their respective national traditions." The wording could lead a British judge to read the English version as confirmation of his traditional approach, and the same could hold true, to a lesser extent, for his German counterpart.

Protocol on the Interpretation of Article 69 EPC

There was a similar fear within the Drafting Committee that the past practices of member states might lead them to interpret Article 69 EPC in a manner that was inconsistent with its intent (and more in line with their own previous practice). It was therefore decided to add an interpretative protocol.

In its original form (shown on the right), this simply required avoidance of two extreme positions: overly literal and overly liberal – caricatures of the pre-EPC UK and German approaches respectively.

The wording of the Protocol was described at the time as "**a masterpiece of ambiguity**". It certainly provided broad latitude for states to apply different standards to the interpretation of claims, as long as they did not stray into the forbidden territory of either ignoring the description and drawings or treating the claims merely as guidelines.

At the diplomatic conference held in Munich in November 2000 (the Munich Conference), concern was expressed that Article 69 EPC and its Protocol were somewhat unclear, having regrettably not achieved, "to the extent desired, the goal of ensuring as uniform an application and interpretation as possible." An amended text was suggested, which came into force in December 2007.

Protocol on the Interpretation of Article 69 EPC (original text)

"Article 69 should not be interpreted in the sense 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. Neither should it be interpreted in the sense 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 patentee has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties."

"Masterpiece of ambiguity" is from Baillie, "Where Goes Europe? The European Patent" (1976) 58 J.P.O.S. 153, 167

Article 69 and its Protocol (as amended)

Of particular concern to the drafters of the “Basic Proposal” put before delegates at the Munich Conference were inconsistencies in the treatment of so-called “equivalents”, which they believed had led to significant practical divergence between member states.

Article 69 underwent relatively mild amendment to remove the words “*terms*”/“*Inhalt*”/“*teneur*” and the two words that followed directly, so that the extent of protection is now determined simply by “the claims”, interpreted in the light of the description and drawings.

The Protocol on the Interpretation of Article 69 underwent more serious amendment (see right). Its new Article 2 was intended to assist in curing the perceived discrepancies between states on the matter of “equivalents”.

A bundle of national patents – the continuing problem

Patents applied for under the EPC become national patents upon grant. Infringement is therefore a question for the national courts. Given that there is currently no common appeal court in Europe, and the Boards of Appeal of the EPO have jurisdiction over the elements of patentability and process under the EPC only, the courts of the member states are effectively supreme when it comes to questions of infringement.

This can cause problems. One example is the infamous *Improver v Remington* litigation, wherein the same patent was litigated in respect of the same infringement in various European states (including Germany, the Netherlands and the UK) with different outcomes: in the UK there was held to be no infringement, whereas both the German and Dutch courts thought there was.

Despite increased judicial co-operation in recent years, there is still variation in claim construction between jurisdictions within the EPC contracting states.

Article 1

"Article 69 should not be interpreted ~~in the sense~~ 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. ~~Neither~~ Nor should it be ~~interpreted in the sense~~ 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 ~~patentee~~ 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 ~~patentee~~ patent proprietor with a reasonable degree of legal certainty for third parties."

Article 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."

Germany: (1993) 24 IIC 838

Netherlands: (1993) 24 IIC 832

UK: [1990] FSR 181

The skilled person – an example

Vericore v Vetrepharm, [2003] EWHC 11, concerns a patent for controlling sea lice infestation in salmon and other sea fish, a particular problem in fish farms. The patent suggested using pyrethroid pesticides (well known for treating pests in sheep and cattle) to treat the fish. One of the key arguments in the case was whether this new use of pyrethroids would have been obvious. The patentee argued that it would not. The skilled person, it claimed, would be a fish health expert and would consider the compound too toxic to administer, not realising that there might be a dosage window in which the compound would kill the lice but not harm the fish. The court did not agree:

"The relevant addressee would have both fish health expertise and toxicology expertise. In real life it would be a team. This can be looked at in two ways. D1 suggests that synthetic pyrethroids are probably the way forward. If this were read by a toxicologist, say someone in the employ of a company making such compounds, he would call in a fish health specialist to consider the application of this class of compounds to fish. On the other hand, if the prior art were read by a fish health expert who was ignorant of pyrethroid toxicology, he would inevitably call in someone with that expertise. In either event one ends up with an addressee having both areas of expertise."

The skilled person – a summary

One of the best judicial discussions of the person skilled in the art can be found in *Lilly Icos v Pfizer* in the English High Court ([2001] FSR 16). The case concerns the patent on the most famous little blue pill in the world, and although the decision was overturned on appeal, the discussion of the skilled addressee is hard to beat:

"This is not a real person. He is a legal creation. He is supposed to offer an objective test of whether a particular development can be protected by a patent. He is deemed to have looked at and read publicly available documents and to know of public uses in the prior art. He understands all languages and dialects. He never misses the obvious nor stumbles on the inventive. He has no private idiosyncratic preferences or dislikes. He never thinks laterally. He differs from all real people in one or more of these characteristics."

The UK approach to the construction of claims – purposive construction

Article 69 EPC is incorporated into UK law as **Section 125(1) of the Patents Act 1977**. Somewhat pointlessly, rather than simply copying the official English version of Article 69 into the UK statute, the Parliamentary draftsman chose to reword the provision. It is, however, not suggested that the two are anything but identical in scope. The Protocol on the Interpretation of Article 69 is incorporated into UK law by virtue of **Section 125(3) PA 1977**: "The Protocol on the Interpretation of Article 69 of the European Patent Convention (which Article contains a provision corresponding to subsection (1) above) shall, as for the time being in force, apply for the purposes of subsection (1) above as it applies for the purposes of that Article."

Section 125(1) Patents Act 1977

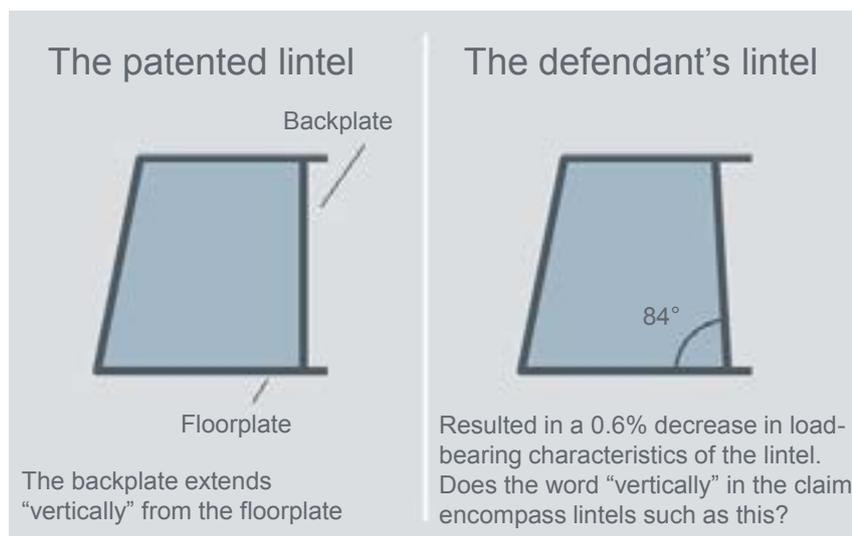
For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawing contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

→ The *Catnic* approach

The first case to come before the higher courts in the UK following the EPC's entry into force was *Catnic Components v Hill & Smith* [1982] RPC 183. It actually concerned a patent granted under the old (pre-EPC) legislation, but was subsequently held to have established an approach that is compatible with Article 69 EPC and the Protocol.

The case concerned the interpretation of the phrase “extending vertically” in the patent for a new type of steel lintel for placing over the top of doors and windows to support the wall above.

The patentee claimed a backplate “extending vertically” from a floorplate. The defendant produced a lintel in which the backplate was inclined at 84 degrees from the floorplate. Was this within the claim?



→ The *Catnic* question

Lord Diplock, giving the lead judgment in the House of Lords (the UK’s highest court), held that the question could not be answered by looking at the literal meaning of the word “vertical” as understood by a geometer. A different approach was required:

“The question in each case is: whether persons with practical knowledge and experience of the kind of work in which the invention was intended to be used, would understand that strict compliance with a particular descriptive word or phrase appearing in a claim was intended by the patentee to be an essential requirement of the invention so that any variant would fall outside the monopoly claimed, even though it could have no material effect upon the way the invention worked.”

Accordingly, in the case in hand, the court thought that the patentee could not have intended to restrict himself to what was exactly geometrically vertical. 84 degrees was still vertical for all practical purposes and therefore within the claim.

This formulation, the so-called *Catnic* question, formed the basis for claim construction in the UK for the next 20 years, and still underpins the approach.

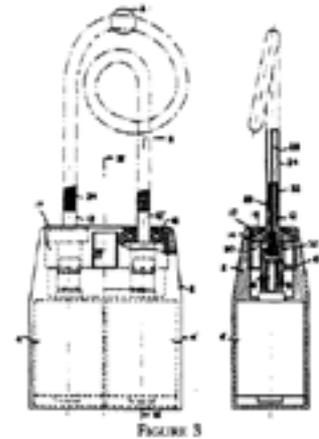
→ The approach under the Protocol – *Improver v Remington*

The first case to consider the infringement of a patent granted under the Patents Act 1977 was *Improver v Remington* [1990] FSR 181. The case concerned Improver Corp's *Epilady* hair removal device (right).

It consisted of a coiled helical spring that was rotated at speed and could be rolled over the body as required. The coils of the spring would therefore open and close like tweezers and trap hairs that were removed by the lateral and cyclic movement of the device.

Remington produced a similar device in which the spring was replaced by an elastomeric rubber rod into which slots had been cut. When bent and rotated, this operated with the same tweezer-like action as the *Epilady*.

Improver's patent claimed a "coiled helical spring". Did Remington's slotted rubber rod infringe?



→ The *Improver* questions

At the interim injunction stage of the proceedings, the Court of Appeal had held that *Catnic* was the correct approach to adopt under the new law. However, when the case came to full trial, the judge considered that Lord Diplock's one question would be better formulated as three. Accordingly, the *Improver* questions were born. These asked:

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.

→ Application of the questions to the facts

Applying the three questions to the facts, the court held that the substitution of the spring with the slotted rubber rod would not have had any material effect on the way the invention worked – both were bendy and slitty and removed hairs by trapping them in a tweezer-like movement. The first question was therefore passed. Moreover, this would have been obvious at the patent's date of publication. Stage 2 was also passed. However, the case for infringement was to fall at the final hurdle, as the judge considered that the skilled person would nevertheless have considered the patentee to have intended strict compliance with the primary meaning of the claim:

"This is not a case like Catnic in which the angle of the support member can be regarded as an approximation to the vertical. The rubber rod is not an approximation to a helical spring. It is a different thing which can in limited circumstances work in the same way."

It was accordingly outside the scope of the claim.

→ A new approach?

For the next 15 years the *Improver* questions were habitually deployed by the English courts as the correct approach under the Protocol. However, this changed in 2004 with the House of Lords decision in *Kirin-Amgen v Hoechst Marion Roussel* [2004] UKHL 46.

The case concerned a patent for the manufacture of erythropoietin (EPO), a polypeptide which regulates the production of red blood cells. The technology involved was complex, as can be deduced from the parties' agreement that the notional addressee would consist of a team of people, including three PhDs with several years' experience in gene technology, molecular biology and cell biology respectively. It would also include two laboratory technicians well acquainted with gene technology and biochemical techniques, and adequate laboratory facilities to support the team.

Reappraising the current approaches to claim construction, Lord Hoffmann, giving the lead judgment in the House of Lords, considered that in cases of such complexity, the *Improver* questions were actually unhelpful.

→ The approach under *Kirin-Amgen*

Reappraising the law on claim construction, Lord Hoffmann stressed that Article 69 EPC was the key provision (the Protocol, on the other hand, is a “protocol on the interpretation of Article 69, and not on the interpretation of claims”). Article 69, he said, declares that the claims function to clearly delimit the scope of monopoly that the patentee is to enjoy. The claims must be interpreted in context – a purely dictionary-based, acontextual, interpretation is not permissible.

However, “the language [the patentee] ... has chosen is usually of critical importance”. Moreover, the conventions of language, word meaning and syntax enable the expression of meanings with great accuracy and subtlety, and this will be understood by the skilled addressee, who “will assume that the patentee has chosen his language accordingly”.

The key question, therefore, is to ask what the skilled addressee would understand the patentee (i.e. the person drafting the patent) to have used the words in the claim to mean, and not what was going on in the inventor’s mind.

Summary of the UK approach to claim construction

The claims are interpreted in the light of the description and the drawings (Section 125(1) PA 1977; Article 69 EPC).

The test used in the UK is that laid down in *Kirin-Amgen*, i.e. to ask what the skilled addressee would understand the patentee (i.e. the person drafting the patent) to have used the words in the claim to mean.

This is not the same as asking what the skilled person would (himself) understand the words to mean, or even asking “what does this word mean to me?”

Context is critical to the analysis.

The German approach – *Schneidmesser I*

Schneidmesser I (2002) 33 IIC 873, at 875

The German approach to claim construction is exemplified by the *Schneidmesser* ("Cutting Knife") decision of the *Bundesgerichtshof* (Supreme Court). The case concerned a patent for a paper-cutting apparatus that comprised a cutting knife co-operating with a counter knife, which were inclined at between 9 and 12 degrees to each other. In the allegedly infringing article, the blades were inclined at 8°40', i.e. just outside the range.

Approaching the issue of construction, the Court stated that the essential question was whether:

"the skilled person, on the basis of considerations linked to the sense of the invention protected in the claims and by using his specialised knowledge, was able to arrive at the modified means used in the contested embodiment as means having substantially similar effects in terms of solving the problem addressed by the invention."

When making this assessment, the claims were not merely a starting point for this analysis, but rather were the "authoritative basis" for doing so.

Nevertheless, if the alleged infringement differs slightly from the claimed invention, i.e. if there is a variant (as in the case before the court) that falls outside the literal meaning of the claim, then the Court considered that the following three questions should be asked:

1. Does the embodiment solve "the problem addressed by the invention with means which, albeit modified, objectively have substantially similar effects?"
If so;
2. Would "the skilled person, as a result of his specialised knowledge ... be able to arrive at the modified means as means having substantially similar effects ... on the basis of the claim?" If yes;
3. Would "the skilled person, considering the technical teaching protected in the claim, understand the differing embodiment with its modified means to be a solution equivalent to that of the patent?"
If so, the equivalent falls within the scope of the patent.

Applying this to the facts, the Court considered that the purpose of angling the blades at between 9 and 12 degrees to each other was simply to ensure a smooth cut. This benefit was also achieved when the angle was slightly more acute. Accordingly, there was infringement.