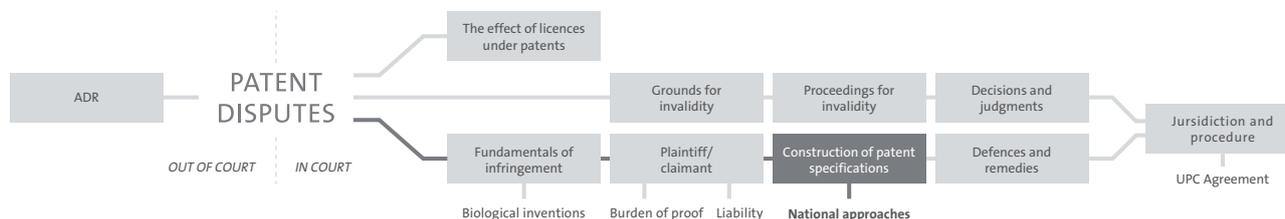


National approaches (Supplementary reading)



The UK approach – purposive construction

The key question

The key question to ask under UK⁸ and Irish law is to ask: what would the skilled person⁹ have understood the patentee to have used the language of the claim to mean? This was the question posed by Lord Hoffmann in the leading authority of *Kirin-Amgen v TKT*. To put *Kirin-Amgen* into context however it is necessary to look at some earlier cases.

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

The development of the UK/Irish approach

The Protocol to Article 69 of the European Patent Convention (“EPC”) begins by stating that Article 69 EPC “*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 ambiguity found in the claims.*” It goes on to say that it should likewise not be taken to mean that the claims should serve only as a guideline. It concludes that the protection conferred by a European patent should be one between these extremes that provides fair protection for the patentee and a reasonable degree of legal certainty for third parties. This instruction to avoid a strict, literal approach has been interpreted as an instruction to avoid what was considered to be the approach of the UK and Irish courts at the time.

However, **purposive construction** has been central to English law for over 30 years. The case that established this approach was *Catnic v Hill & Smith*.

“A patent specification should be given a purposive construction rather than a purely literal one derived from applying to it the kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge.”
Lord Diplock, *Catnic Components Ltd v Hill & Smith Ltd* [1982] RPC 183 at 243

Catnic was concerned with the question of whether a support member that extended 6 or 8 degrees from the vertical nevertheless fell within the scope of the term “*extends vertically*”. The court held that it did.

⁸ The EPC and The UK Patents Act 1977 (as amended) apply equally to all parts of the United Kingdom. However, jurisdictionally, the United Kingdom is divided into three parts, England and Wales, Scotland and Northern Ireland. The proceedings in Scottish courts, however, differ markedly from those in the other jurisdictions.

⁹ Hereinafter, the masculine shall include the feminine.

Catnic also considered the relevance of equivalents to the issue of construction, holding that the question to be asked was whether (or not) the skilled person would understand the patentee to intend “strict compliance” with a particular word or phrase used in claim, such that any variant would fall outside the patentee’s monopoly, even though it had no material effect on the way that the invention worked. However, the question would not even arise if the variant in fact had a material effect on the manner in which the invention worked, or if it was not obvious to the skilled person that the variant had no effect on the manner in which the invention worked.

Lord Hoffmann summarised these questions in the subsequent case of ***Improver v Remington***:

Improver Corp v Remington Consumer Products Ltd [1990] FSR 181 at 189

“The Court should ask itself the following three 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 has 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.*

On the other hand, a negative answer to the last question would lead to the conclusion that the patentee was intending the word or phrase to have not a literal but a figurative meaning... denoting a class of things which include the variant and the literal meaning.”

These questions became known as the “Improver” or “Protocol” questions and, prior to *Kirin-Amgen*, were widely applied by the UK/Irish courts.

The approach following *Kirin-Amgen*

Kirin-Amgen, reported in 2005, has put purpose at the very heart of the UK/Irish approach to claim construction. The essential question, as mentioned above, is: what would the skilled person have understood the patentee to have used the language of the claim to mean? When a skilled person reads a patent specification he assumes that its purpose is to describe and demarcate an invention – a practical idea which the patentee has had for a new product or process. In determining the patentee’s purpose, the language that the patentee has chosen to use is important. We are able to use words and syntax to convey meaning with great accuracy and subtlety, and the skilled person will ordinarily assume that the patentee has chosen his language accordingly. In the end it

comes back to the question of what the skilled person would understand the patentee to have meant by the words used.

In the view of Lord Hoffmann, who gave the leading opinion, this approach fully complies with the requirements of the **Protocol to Article 69 EPC**. A principle of claim construction that is fair to the patentee is one that gives the patentee the full extent of the monopoly which the person skilled in the art would think that the patentee was intending to claim. Likewise, reasonable certainty for third parties is provided by a principle of claim construction that does not give the patentee more than the full extent of the monopoly which the person skilled in the art would think that he was intending to claim. Furthermore, to give a broader interpretation could be unfair to the patentee, as that could expose the patent to invalidity challenges.

The UK/Irish approach to construction has been comprehensively summarised in subsequent decisions, in particular **Virgin Atlantic v Premium Aircraft Interiors**, as follows:

Virgin Atlantic v Premium Aircraft Interiors
[2010] RPC 8

Principles of claim construction

One might have thought there was nothing more to say on this topic after Kirin-Amgen v Hoechst Marion Roussel. The judge accurately set out the position, save that he used the old language of Art 69 EPC rather than that of the EPC 2000, a Convention now in force. The new language omits the terms of from Art. 69. No one suggested the amendment changes the meaning. We set out what the judge said, but using the language of the EPC 2000:

The task for the court is to determine what the person skilled in the art would have understood the patentee to have been using the language of the claim to mean. The principles were summarised by Jacob LJ in Mayne Pharma and refined by Pumfrey J in Halliburton v Smith International following their general approval by the House of Lords in Kirin-Amgen v Hoechst Marion Roussel. An abbreviated version of them is as follows:

Mayne Pharma v Pharmacia Italia
[2005] EWCA Civ 137

Halliburton v Smith International
[2005] EWHC 1623 (Pat)

Kirin-Amgen v Hoechst Marion Roussel
[2005] RPC 9

- *The first overarching principle is that contained in **Article 69 of the European Patent Convention**.*
- *Article 69 says that the extent of protection is determined by the claims. It goes on to say that the description and drawings are to be used to interpret the claims. In short, the claims are to be construed in context.*
- *It follows that the claims are to be construed purposively, the inventor's purpose being ascertained from the description and drawings.*

- *It further follows that the claims must not be construed as if they stood alone, the drawings and description only being used to resolve any ambiguity. Purpose is vital to the construction of claims.*
- *When ascertaining the inventor’s purpose, it must be remembered that he may have several purposes depending on the level of generality of his invention. Typically, for instance, an inventor may have one, generally more than one, specific embodiment as well as a generalised concept. But there is no presumption that the patentee necessarily intended that the widest possible meaning consistent with his purpose be given to the words that he used: purpose and meaning are different.*
- *Thus purpose is not the be-all and end-all. One is still at the end of the day concerned with the meaning of the language used. Hence the other extreme of the Protocol – a mere guideline – is also ruled out by **Article 69** itself. It is the terms of the claims which delineate the patentee’s territory. It follows that if the patentee has included what is obviously a deliberate limitation in his claims, it must have a meaning. One cannot disregard obviously intentional elements.*
- *It also follows that where a patentee has used a word or phrase which, acontextually, might have a particular meaning (narrow or wide), it does not necessarily have that meaning in context.*
- *It further follows that there is no general “doctrine of equivalents”.*
- *On the other hand, purposive construction can lead to the conclusion that a technically trivial or minor difference between an element of a claim and the corresponding element of the alleged infringement nonetheless falls within the meaning of the element when read purposively. This is not because there is a doctrine of equivalents: it is because that is the fair way to read the claim in context.*
- *Finally, purposive construction leads one to eschew the kind of meticulous verbal analysis which lawyers are too often tempted by their training to indulge in.*

It is clear that “purpose” is a vital part of construction. But it is not the be-all and end-all. What matters is the **meaning** of the words used in the claims.

Equivalents

As the *Virgin Atlantic* summary states, there is no general “doctrine of equivalents” under UK law. This was also the view of Lord Hoffmann in *Kirin-Amgen*, who held that Article 69 EPC – which requires the extent of protection conferred by a European patent to be determined by the claims – prohibits any approach to the determination of the scope of protection that extends protection **outside** the claims. It is in that sense that there is no doctrine of equivalents under UK law.

That is not to say that the UK approach does not take equivalence into consideration. On the contrary, equivalence is still an important part of the background of facts known to the skilled man which would affect what he understands the claims to mean. Accordingly, equivalents will fall within the scope of the claims of a European patent if, properly construed, the skilled person would understand from the words of the claim that the patentee had intended to cover such an equivalent. A purposive, contextual construction is key to determining this question.

In *Kirin-Amgen*, Lord Hoffmann did not disapprove the use of the “Protocol” questions set out above, but he cautioned that those questions are to be seen as a guide, not a rubric, and that they may not always be useful, for example in cases concerning rapidly advancing technologies. It should also be noted that the Protocol questions came about in order to prevent infringement being avoided by an overly strict, literal interpretation of the claims. The questions should therefore have less application when, in place of the old “literal” approach, a purposive approach to claim construction is adopted in accordance with *Kirin-Amgen*. In practice, the English courts, following *Kirin-Amgen*, have applied a purposive construction of patent claims and have not usually referred to the “Protocol” questions.

Kirin-Amgen (supra) at 190

The German approach: meaning of the claim

In Germany the starting point for claim interpretation is the wording of the claims. The scope of protection cannot be derived from the description and the drawings alone. A teaching which is exclusively disclosed in the description but which has not been incorporated into the claim wording is not protected. The patent description and drawings are only means for interpreting the content of the patent claims. They do not define the scope of protection of the patent independently.

The focus on the wording of the claim also means that a broad wording cannot be limited by reference to words used in the description. The description and the drawings cannot limit the scope of protection.

BGH, GRUR 2004, 1023 – “*Bodenseitige Vereinzelungseinrichtung*”; BGH, GRUR 2007, 778 – “*Ziehmaschinenzugeinheit*”

The description and drawings are thus means for assisting in interpreting the wording and the meaning of the wording of the claim. It has also been recognised that the patent specification can contain its own lexicon for the terminology used, which needs to be taken into account when determining the understanding of the wording of the claim.

In practical terms, the courts make a careful comparison of the wording of the claims and their meaning with the disclosure in the description and drawings in order to interpret the patent specification as a whole and to avoid inconsistencies between the claim wording and the description.

If, for example, several interpretations of a claim are possible, the courts will take into account the variants in the patent specification and will prefer an interpretation that such variants remain covered by the claim wording.

The *Bundesgerichtshof* (German Federal Supreme Court) (BGH) has also stressed that the words and/or features of the claims cannot be interpreted individually, out of context. It is important to remember that the features of the claim constitute an interdependent unit. This means that they cannot be interpreted separately, regardless of the general context of the teaching protected by the claim as a whole.

BGH, GRUR 2004, 844 –
“Drehzahlermittlung”;
BGH, GRUR 2012, 1124 –
“Polymerschaum”

Moreover, it is important to establish the technical meaning the individual features have in their context and their contribution to the intended result of the claim. As a result of this exercise, a feature can have a different meaning in a prior art document to which the patent refers. It is also recognised under German law that the question of whether the claim in a broader interpretation is invalid or constitutes added subject-matter is irrelevant for the claim interpretation and is only a question of validity. Arguably, this approach is a consequence of the bifurcation system in Germany.

Against this background, several criteria for claim interpretation have been developed by the German courts. Some of them are described below.

Sub-claims and embodiments may also provide an indication as to how the wording or features of the main claim should be interpreted. However, the fact that a particular variant has not been expressly mentioned in the description is no indication that such variant is outside the scope of the patent. Sub-claims and embodiments are only examples of how the teaching of the main claim can be implemented. The scope of protection is not limited to the variants described in the sub-claims or in an example.

Claim interpretation can also involve a function-oriented interpretation. Features and terms in the claim can be interpreted functionally according to the technical function attributed to the teaching of the invention. What the patent specification subjectively discloses as the object of the invention is not relevant. The objective problem has to be determined in order to identify which disadvantage in the state of the art is to be avoided and which advantages are to be achieved by a specific feature. However, if the feature is defined by its physical form, it may not be reduced to its function only, and a functional interpretation may not be appropriate. In this case, only the doctrine of equivalence can help to extend the scope of protection.

BGH, GRUR 2010, 602 –
“Gelenkanordnung”

OLG Düsseldorf, GRUR-RR 2014 –
“WC-Sitzgelenk”

Indicators to help interpret a feature can also be derived from the state of the art, but the German courts are generally cautious about

interpreting features in a claim in a limited way by reference to the prior art documents.

Features which refer to a specific effect or function can be problematic need to be interpreted carefully. They may indicate that an infringing embodiment needs to be in a form that enables this function to be achieved. Sometimes they do not limit the scope of protection but only refer to a specific functionality.

BGH, GRUR 2009, 837 –
“Bauschalungsstütze”

The French approach

The French courts will take into account the technical contribution of the patent over the prior art when construing the claims in order to assess infringement.

In summary, the first step is to determine whether the patent claims differ from the cited prior art by a novel form (or structure) (these are called “particular means”) or by a novel function (these are called “general means”).

This distinction is relevant in assessing whether there is infringement, either on a literal basis or by equivalence.

Claim construction

The French courts adopt a purposive approach to patent construction, to give a broad meaning to the claim, whilst nevertheless defining the core of the claimed invention.

This key step is governed by Article 69 of the EPC for the French designation of European patents and by **Article L. 613-2** of the *Code de la propriété intellectuelle*, the French Intellectual Property Code for national patents. These two articles, which are identical, provide that “*the extent of the protection conferred by a patent shall be determined by the terms of the claims*” but that “*nevertheless, the description and the drawing shall be used to interpret the claims*”.

The French approach was defined by the decision issued by the *Cour d’appel* (“CA”), Court of appeal of Paris on 11 October 1990 in the first case involving a European patent, (*Dolle v Emsens*), and that approach continues to apply:

“Article 69, as interpreted by its protocol, has chosen a middle way between a literal construction of the claim, in which the description and the drawings should be used only to resolve ambiguities, and a broad construction in which the claim should be used just as a guideline and

in which the protection would extend to what, according to the skilled person, the patentee had intended to protect.

This compromise must ensure a fair protection for the patentee against the skill of the infringer to avoid infringement and enable third parties to know with certainty what is protected.

In view of Article 69, the judge must construe the claims by reference to the description and to the drawings.

He must give to the claim its full meaning, so that this condensed text is understood.

The construction requires that the substance of the claimed invention is defined, without adding any element which the claim did not include and did not suggest.“

The reference to the full meaning of the claim and the substance of the invention shows that French judges adopt a purposive approach to the construction of patent claims. They seek a fair balance, ensuring both a reasonable protection for the patentee and a reasonable degree of legal certainty for third parties.

When construing a claim, French judges seek to understand its teaching, through the eyes of the skilled person, as well as the technical problem solved by the patent, the means taught to solve that problem and the way in which those means function.

However, the construction of a claim must not result in adding to the claim a feature which it does not include (“interpreting is not adding”) or, conversely, in omitting a feature which it comprises.

Definitions provided in dictionaries, manuals or other documents exhibited by the parties may be taken into account when seeking to understand the patent, but they should never take precedence over the meaning stemming from the patent itself.

Such documents are used mainly to help clarify, where necessary, the knowledge of the skilled person and the way he would read and understand the patent.

Parties are not prohibited from producing a written expert opinion on the issue of claim construction, if it is necessary to clarify the documentary evidence relied upon and to substantiate the knowledge of the skilled person. However, the use of expert opinions on this point is not usual in France.

The proper construction of the patent is relevant to the assessment of infringement in order to identify:

- the features of the claims which should be considered as the so-called “essential means”, i.e. the features without which the claim would not be considered novel and inventive, or the features without which the claimed means would not perform the function of the invention; and
- the features which should be considered as minor (i.e. details) because they are not necessary for the claim to be considered novel and inventive over the prior art and are not indispensable for the claimed means to perform their function.

This analysis requires a consideration of the contribution of the invention to the art, the aim being to understand whether the means taught by the patent differ from the prior art only, or mainly, by details of structure (or form), or whether they perform a new function.

Claim construction is partly a question of fact and partly a question of law.

The *Cour de cassation* (French Supreme Court) (Cass) will review the legal reasoning of the *Cour d’appel* but will not review its factual findings.

As a result, the *Cour de cassation* will only overturn decisions where the construction exercise led to a distortion of the claim (by either adding or omitting a feature) or to the creation of a contradiction between the specification and the claim.

It will not, however, review the technical findings of the *Cour d’appel* as to the knowledge of the skilled person.

The claims and the specification are construed as at the filing date, or priority date, of the patent.

This approach to claim construction ensures that the scope given to the claims is the same for both validity and infringement, so that the so-called “**Angora cat**” paradox cannot apply.

The man skilled in the art and the common general knowledge

The person skilled in art has no place in the assessment of infringement under French law, notably because the question of whether the alleged infringement was an obvious alternative to the claimed invention is not relevant (see below).

However, the person skilled in the art and his common general knowledge are taken into account for the purpose of construing the claims and the specification, (see above).

The Angora cat paradox refers to the contradictory approaches adopted by some patentees during prosecution and infringement litigation: for the purpose of assessing validity, the claims are presented as narrow (like a wet Angora cat) to better distinguish them from prior art; but once granted and for the purpose of an infringement case, the same claims become far broader (like the dry Angora cat with its fluffy coat).

Under French law, the skilled person is considered to be the same for all aspects of assessing the patent (see above).

The French tests for infringement

The philosophy which underlies the purposive construction approach described above also leads French judges to a relatively broad conception of infringement by equivalence. This trend has given rise to the idea of “France versus The rest of the world”, as in the similarly titled article by Pierre Véron in Patent World magazine.

“Doctrine of Equivalents, France v The rest of the world” by Pierre Véron, Patent World, November 2001

Infringing means were defined by Paul Mathély in a leading text as those reproducing the essential means of the claimed invention, i.e. the novel and inventive means brought by the patent to the art and which are necessary and sufficient to perform the function of the claimed invention. This broad approach is also reflected by the traditional formula *“infringement is assessed by similarities and not by differences”*.

“Les éléments constitutifs de l'invention sont les moyens, nouveaux et inventifs, que le brevet apporte à la technique antérieure, et qui exercent la fonction qu'il a prévue. Ces moyens sont essentiels, lorsqu'ils sont nécessaires et suffisants pour assurer l'exécution de cette fonction ; les moyens essentiels sont ceux qui forment la substance de l'invention, et qui sont la condition même de la fonction qu'elle exerce.” (« Le nouveau droit français des brevets d'invention » by Paul Mathély, chapter II, section 1, page 413)

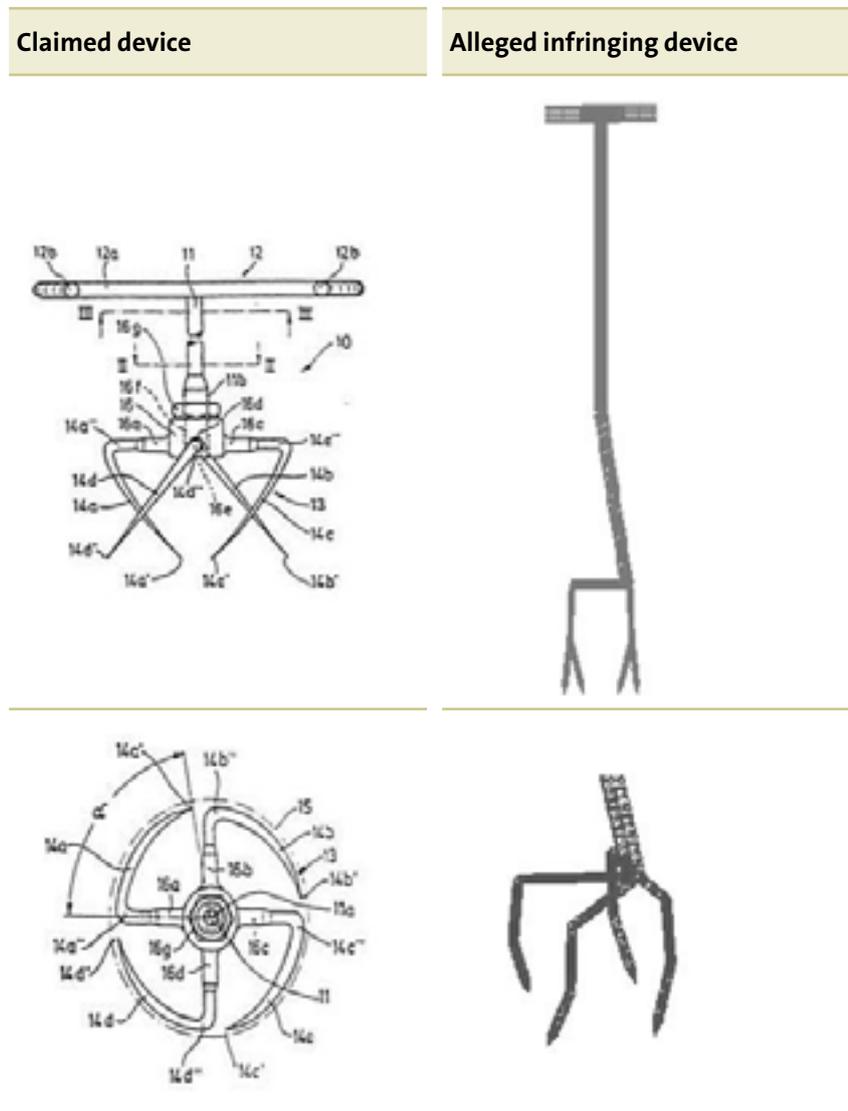
The French infringement test can be considered as threefold: the first question is whether there is literal infringement, i.e. whether the accused means reproduce the claimed means both in their form (or structure) and function. If not, then the second question is whether there is infringement by reproduction of the essential means of the claim, a question requiring a positive reply if the differences between the claimed and the accused means relate only to details and not to the essential means of the claim. If not, then the third question is whether there is infringement by equivalence, which is the case if the claimed invention performs a new function and the accused means perform said function for the same results as the claimed means.

For all of these steps, both the claimed and the means at issue should be considered in terms of form (or structure) as well as function (the primary technical effect) and results (the advantages provided by the invention).

Tribunal de Grande Instance (TGI), Regional Court of Paris, 3rd Chamber, 1st section, 26 April 2000 (Garden Claw v Leborgne)

The explanation below will be illustrated by the example of a claim covering a gardening device.

The figures below show the claimed device and the alleged infringing device:



The patent in issue relates to a manual gardening device, comprising a handle at one end and a tool at the other end, for loosening soil, mixing soil layers and removing weeds without great effort by way of helical movement.

Claim 1 relates to the structure of the tool, and in particular the arrangement of its tines, which have the following main characteristics:

- The tines envelop a virtual cylinder along the axis of the shaft.
- They form an angle of 90° to the shaft.

On the basis of the explanations provided by the description, the Court considered that the function of the device was to rotate, allowing insertion of the tool into the soil in the manner of a screw, for loosening the soil and mixing its different layers during rotation.

Claim 1 reads:

“A manual agricultural implement, comprising a shaft (11), a handle (12) arranged on one end of said shaft and a tool on the other end of said shaft and including a plurality of helically curved tines (14) disposed around said shaft (11) in radially spaced relationship therewith, characterized in that said tines (14a – 14d) extend parallel to each other along an imaginary cylinder (15) which is coaxial to said shaft (11), and that said tines (14a – 14d) are evenly distributed over the circumference of said imaginary cylinder (15) and curved such that the lines which connect the tine feet (14a” – d”) and tine tips (14 a’ – 14 d’) with the axis of said shaft (11) form an angle of approximately 90°.”

Literal infringement

There is literal infringement (“*contrefaçon à l’identique*”) when the accused means reproduce the claimed means in their form and their function for the same result.

However, most often, the accused means are not identical to the claimed ones.

In the gardening device example, the device did not reproduce the claimed means in their form and function for the same result, since there was a difference notably relating to the angle between the axis of the shaft and the tines (which was 90° in the patent but far smaller in the alleged infringement).

However, far from excluding infringement, the existence of differences leads to the second step of the infringement test, namely determining whether these differences relate to detail or to the essential means of the claim.

Infringement by reproduction of the essential means of the claim

There is infringement by reproduction of the essential means of the claim when the differences in the alleged infringing means relate only to minor features.

The question to be considered is, in fact, two-fold:

- First, the claimed and infringing means should be compared so as to determine the features of the claim which are not reproduced.
- Second, the non-reproduced features should be assessed to determine whether they amount only to detail (so there is infringement) or to essential means of the claim (in which case it will be necessary to apply the third part of the infringement test).

French decisions illustrate the various questions which should be examined to determine whether a feature is a detail or an essential feature of the claim:

- Is it presented as essential in the patent or during prosecution, for example? Does the patent mention alternatives?
- Is the feature one of those without which the claim would not have been found novel and inventive?
- Is the feature indispensable to fulfilling the function of the claimed means and to solving the technical problem underlying the invention?

The question whether the patent mentions alternatives appears in a decision of the TGI Paris, 3rd chamber, 4th section, of 28 March 2013 (*Somfy v Gaposia*): the fact that the patent precisely described the form of the brake, without mentioning any alternative, was considered as showing that this feature was essential — (“*L’invention n’envisage qu’un seul type de frein... sans autre alternative. Il ne peut donc être considéré que cet élément de la revendication du brevet n’est pas essentiel*”, i.e. “*The invention considers only one type of brake... with no alternative. Therefore, it cannot be considered that this feature of the claim is not essential.*”)

In a decision of the TGI Paris of 29 September 2004, 3rd chamber, 1st section (*L’Oréal / Al Khouri*), the judges examined the technical importance of the modified means: in this case, the use of the polymer selected by the defendant changed the whole chemical reactions involved in the formation of the capsules: “*That, therefore, there cannot be an infringement, since the defendants’ process is based on a polymer while the claimant’s process involves no polymerisation chemical reaction. [...] the CNRS patent, used by the defendants, uses a polymer that dissolves in organic phase leading to a solution polymer which, after injecting the solution, precipitates at the surface of the oil nanodroplets also leading to nanocapsules;*”

If those claimed means which are not literally reproduced are merely a minor feature (i.e. a detail), then there is infringement. Otherwise, it is necessary to consider whether there is infringement by equivalence.

When applied to the example of the gardening tool, this two-fold test leads to the following conclusion: the accused device differs from the claim notably in that it has tines forming angles of less than 90°. The angle of 90° was not a minor feature, notably because it was said to be important during prosecution to obtain the grant of the patent and because it is indispensable for the rotation of the tool in the soil like a screw. As a result, this feature is essential and the accused device does not constitute an infringement by reproduction of the essential features of the claims.

This leads to the last part of the infringement test, which involves the determination of whether there is infringement by equivalence.