This paper examines the use of the Protocol questions in deciding patent infringement actions. The author details the origins of the Protocol questions and, in light of the decision by the House of Lords in Kirin-Amgen v. Hoechst Marion Roussel Ltd., examines the limitations of the use of those questions in deciding patent infringement actions.

Dans cet article, l’auteur examine le recours aux questions de Protocole pour trancher les litiges en matière de violation de brevet. L’auteur explique en détails les origines des questions de Protocole et, à la lumière de la décision rendue par la Chambre des Lords dans l’arrêt Kirin-Amgen c. Hoechst Marion Roussel Ltd., analyse les limites au recours à ces questions pour trancher les litiges en matière de violation de brevet.

This article discusses the limitations on the usefulness of the so-called Protocol questions in deciding infringement actions in Canada, as illustrated by the recent decision of the House of Lords in Kirin-Amgen v. Hoechst Marion Roussel Ltd. The Protocol questions, although of U.K./European origin, have been central to Canadian infringement decisions since the endorsement and adoption of “purposive construction” by the Supreme Court of Canada.

At the heart of every patent infringement action is the question: “What is the invention disclosed and claimed in the patent?” In Canada, since at least December 15, 2000, when the Supreme Court released its decisions in Free World Trust v. Électro Santé Inc. and Whirlpool Corp. v. Camco Inc., it has been clear that when deciding this question, Canadian courts, like those in the United Kingdom and increasingly in other European countries, are to restrict themselves to the language of the claims. In Free World Trust, Binnie, J. made it clear that there is to be no consideration of “vague notions” such as the “spirit of the invention.” However, in order to “achieve a fair and predictable result” the claims of the patent are not to be

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read in a purely literal way, which may, depending on the facts, cause an
injustice to one party or the other, but rather are to “be read in an informed
and purposive way.”4

That leaves the question of how to go about reading the claims in an
“informed and purposive way.” The Protocol questions were designed to
provide a framework for reading the claims in an informed and purposive
way where a particular feature or element of the accused product or
process differs in some way from the “primary, literal or acontextual
meaning” of the language used in the claims to describe that feature or
“element.”5 Since the court is not to read the language of the claims in a
purely literal way, the issue becomes how far it should stray from the
“primary, literal or acontextual meaning” to find infringement. If the court
stays too close and permits the defendant to avoid infringement, there may
be an injustice to the patentee. If the court goes too far, the claims lose their
ability to provide notice to others of the scope of the claimed monopoly.

The Protocol questions have their genesis in the celebrated case of
Catnic Components Ltd. v. Hill & Smith Ltd. from which the term
“purposive construction” originates.6 In that case, Lord Diplock made the
following comment:

My Lords, a patent specification is a unilateral statement by the patentee, in words of
his own choosing, addressed to those likely to have a practical interest in the subject
matter of his invention (i.e. “skilled in the art”), by which he informs them what he
claims to be the essential features of the new product or process for which the letters
patent grant him a monopoly. It is called “pith and marrow” of the claim. 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. 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.7

In Improver Corporation v. Remington Consumer Products
Limited, Hoffman, J. distilled these remarks into the “Protocol
questions” reproduced below:

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4 Supra note 2 at 1043.
5 This phrase is used in Improver Corporation v. Remington Consumer Products
7 Ibid. at 242.
(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.

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 (the figure being a form of synecdoche or metonymy⁸) denoting a class of things which included the variant and the literal meaning, the latter being perhaps most perfect, the best-known or striking example of the class.⁹

The patent at issue in Improver was a European patent, and these questions are now known as the Protocol questions because they are said to embody the directive of the Protocol on the Interpretation of Article 69 of the European Patent Convention.¹⁰ Article 69 of the EPC and the Protocol on its interpretation contain directions on how to draft and interpret European patent claims that are similar to those found in Section 27(4) of the Canadian Patent Act,¹¹ and to the reasons in Free World Trust¹² with respect to Canadian patent claims.

In Improver, Hoffman, J. paraphrased the Protocol as follows:

[T]he scope of the invention must be found in the language of the claims. Extrinsic material such as the description can be used to interpret those claims but cannot provide independent support for a cause of action, which the language of the claim, literally or figuratively construed, simply cannot bear. On the other hand, the claims should not be interpreted literally but in a way which “combines a fair protection for the patentee with a reasonable degree of certainty for third parties.”¹³

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⁸ The Oxford Universal Dictionary defines a synecdoche as “a figure by which a more comprehensive term is used for a less comprehensive or vice versa” and a metonymy as “a figure in which the name of an attribute or adjunct is substituted for the thing meant, e.g. scepter for authority.”

⁹ Supra note 5 at 189.

¹⁰ Convention on the Grant of European Patents, European Patent Organization, 5 October 1973 [EPC].


¹² Supra note 2.

¹³ Supra note 5 at 190.
The *Catnic* case\(^{14}\) itself is a most useful example for showing how the Protocol questions can be used to meet the objective of combining a fair protection for the patentee with a reasonable degree of certainty for third parties or, to use the words from *Free World Trust*, to “achieve a fair and predictable result.”\(^{15}\) Also, in *Kirin-Amgen* Lord Hoffman uses the *Catnic* example to explain the limitations on the use of the Protocol questions.\(^{16}\) For these reasons, before reviewing Lord Hoffman’s explanation in *Kirin-Amgen*, a review of the *Catnic* case itself is appropriate.

A concise description of the facts in *Catnic* is found in the *Whirlpool* decision:

The patent in issue dealt with galvanized steel lintels for use in building construction. Lintels are structural members placed over openings such as door and windows to support the building above. The patent taught an ingenious new type of lintel of sheet metal bent into a box-like “lazy Z” shape that was light to handle and inexpensive to manufacture. The defendant knew of the plaintiff’s product but was not familiar with the plaintiff’s patent. The claims (of which they were unaware) taught that the lintel must have “a second rigid support member extending vertically from or from near the rear edge of the first horizontal plate”. Vertical alignment would maximize the load-bearing capacity. For reasons unrelated to patent avoidance, the rigid support member in the defendant’s product was inclined about eight degrees off vertical.\(^{17}\)

The issue in *Catnic* was whether the defendant’s lintel infringed an existing patent despite the fact that the second rigid support did not “extend vertically,” as that term would be interpreted using its primary, literal or acontextual meaning, namely that the angle between the “second rigid support member” and the “first horizontal plate” was 90°. The House of Lords found that the patent was nevertheless infringed. The following is an analysis of the *Catnic* facts using the Protocol questions:

(1) The 8-degree variation did not make a difference to how the accused device functioned in terms of its load-bearing capacity.\(^{18}\)

(2) It would have been obvious to someone skilled in the art as of the relevant date that the 8-degree variation would also work.\(^{19}\)

\(^{14}\) *Supra* note 6.

\(^{15}\) *Supra* note 2 at 1043.

\(^{16}\) *Supra* note 1.

\(^{17}\) *Supra* note 3 at para. 44.

\(^{18}\) Or, to use the words of Binnie, J. in *Free World Trust*, *supra* note 2 at para. 55, “the variant or component would perform substantially the same function in substantially the same way to obtain substantially the same result.”

\(^{19}\) The relevant date is another subject altogether, and is not discussed in this article.
(3) A skilled reader would not have understood from the language of the claim, with reference to the specification, that the patentee intended to be restricted to 90°.20

The primary point here, however, is that the Protocol questions do not work equally well with all fact patterns because they presuppose that a “primary, literal or acontextual meaning” for the claim language in question can be identified as it was in Catnic. As Lord Hoffman has now explained in Kirin-Amgen:

Lord Diplock’s … intention [in Catnic] was to point out that a person may be taken to mean something different when he uses words for one purpose from what he would be taken to mean if he was using them for another. The example in the Catnic case was the difference between what a person would reasonably be taken to mean by using the word “vertical” in a mathematical theorem and by using it in a claimed definition of a lintel for use in the building trade.21

Lord Hoffman then proceeded to make the following distinction:

When speaking of the “Catnic principle” it is important to distinguish between, on the one hand, the principle of purposive construction which I have said gives effect to the requirements of the Protocol, and on the other hand, the guidelines for applying that principle to equivalents, which are encapsulated in the Protocol questions. The former is the bedrock of patent construction, universally applicable. The latter are only guidelines, more useful in some cases than in others. I am bound to say that counsel show a tendency to treat the Protocol questions as legal rules rather than guides, which will in appropriate cases help to decide what a skilled man would have understood the patentee to mean.22

The learned judge went on to note that certain dimensions of these cases more readily lend themselves to fixed definition than others:

The notion of strict compliance with the conventional meanings of words or phrases sits most comfortably with the use of figures, measurements, angles and the like, when the question was whether they allow for some degree of tolerance or approximation. That was the case in Catnic and it is significant that the “quintet” of cases in which the German Bundesgerichtshof referred to Catnic and said that its approach accorded with that of the House of Lords were all concerned with figures and measurements. In such

20 In some cases, patentees are held to have (perhaps mistakenly) claimed a narrower invention than the disclosure would have supported. Such choices are seen as “self-inflicted wounds”. The court cannot infer meanings the claims cannot reasonably support.
21 Supra note 1 at 186.
22 Ibid. at 191.
cases, the contrast with strict compliance is approximation and not the rather pretentious figures of speech mentioned in the Protocol questions.23

Where, as in Kirin-Amgen, the claim language is not imbued with some clear primary, literal or acontextual meaning and therefore must be given a contextual meaning by the court even before the Protocol questions can be posed, the questions may answer themselves. The patent in question in Kirin-Amgen related to the production of erythropoietin (EPO), a polypeptide that functions in the blood to regulate the production of red blood cells, by recombinant DNA technology. In the claims in question, the patentee had claimed a listed set of DNA sequences for use in securing expression of certain polypeptides in a host cell, as well as the produced polypeptides themselves. The defendants had applied a new technique to produce the polypeptides using the DNA sequences listed in the claims. The claim language did not use “figures, measurements, angles and the like,” but rather terms such as “host cell” and “exogenous DNA sequence.” Therefore, before considering the Protocol questions, the trial judge had to provide contextual meaning to the words at issue. Having done so, it was an error for the trial judge to go on to use the Protocol questions to determine whether a variation from the meaning the Court had chosen for the words constituted infringement or not. As Lord Hoffman explained:

No doubt there are other cases, not involving figures or measurements, in which the question is whether a word or phrase was used in a strictly conventional or some looser sense. But the present case illustrates the difficulty of applying the Protocol questions when no such question arises. No one suggests that “an exogenous DNA sequence coding for EPO” can have some looser meaning which includes “an endogenous DNA sequence coding for EPO”. The question is rather whether the person skilled in the art would understand the invention as operating at a level of generality which makes it irrelevant whether the DNA which codes for EPO is exogenous or not. That is a difficult question to put through the mangle of the Protocol questions because the answer depends entirely upon what you think the invention is. Once you have decided that question, the Protocol questions answer themselves.24

Lord Hoffman also notes it is not only the “figures, measurements [and] angles” alluded to earlier that have sufficient primary, literal or acontextual meaning to make the Protocol questions useful.25 Thus, it will be an open question in many cases whether the claim language has a sufficiently clear “primary meaning” for the Protocol questions to apply. This leaves the applicability of the Protocol questions in a state of uncertainty. However, Lord Hoffman does provide some clear guidance when he reminds us that “[t]he determination of the extent of protection

23 Ibid. at 193.
24 Ibid. at 193-94.
25 Ibid. at 194.
conferring by a European patent [and this might equally be said of a Canadian patent] is an examination in which there is only one compulsory question … what would a person skilled in the art have understood the patentee to have used the language of the claim to mean?”26

There do not seem to be any Canadian decisions in which the applicability of the Protocol questions has been discussed based on the reasons of Lord Hoffman in *Kirin-Amgen*. However, since the questions form the heart of many decisions, one might expect that the issue will arise shortly in Canadian proceedings.

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