

House of Lords UK, 27 November 1980, Catnic Components Ltd v Hill & Smith Ltd

PATENT LAW

Patent specification should be given a purposive construction

• 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

• 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 those novel features only that he claims to be essential that constitute the so-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, of course, does not arise where the variant would in fact have a material effect upon the way the invention worked.

• Nor does it arise unless at the date of publication of the specification it would be obvious to the informed reader that this was so.

• Where it is not obvious, in the light of then-existing knowledge, the reader is entitled to assume that the patentee thought at the time of the specification that he had good reason for limiting his monopoly so strictly and had intended to do so, even though subsequent work by him or others in the field of the invention might show the limitation to have been unnecessary. It is to be answered in the negative only when it would be apparent to any reader skilled in the art that a particular descriptive word or phrase used in a claim cannot have been intended by a patentee, who was also skilled in the art, to exclude minor variants which, to the knowledge of both him and the readers to whom the patent was addressed, could have no material effect upon the way in which the invention worked....

Source: [1982] RPC 183; [22 IIC 699 \(1981\)](#)

House of Lords UK, 27 November 1980

(...)

Decision of the House of Lords - October 29, 1980
October 30, 1980, November 27, 1980

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[...]

Claim :

"1. A lintel for use over apertures in cavity walls having an inner and outer skin comprising a first horizontal plate or part adapted the support a course or a plurality of superimposed units forming part of the inner skin and a second horizontal plate or part substantially parallel to the first and spaced therefrom in a downward vertical direction and adapted to span the cavity in the cavity wall and be supported at least at each end thereof upon courses forming parts of the outer and inner skins respectively of the cavity wall adjacent an aperture, and a first rigid inclined support member extending downwardly and forwardly from or near the front edge adjacent the cavity of the first horizontal plate or part at an intermediate position which lies between the front and rear edge of the second plate or part and adapted to extend across the cavity, and a second rigid support member extending vertically from or from near the rear edge of the first horizontal plate or part to join with the second plate or part adjacent its rear edge."

The complete specification was filed on the 29th December 1969 and published on 6th December 1972. Lintels manufactured in accordance with the patent quickly achieved considerable success upon the market. At about the beginning of 1974 the respondents ("Hill and Smith") who are old established fabricators of galvanised steel products, and had for some time past been carrying out large contracts for the manufacture of crash-barriers for roads, foresaw a contraction of the demand for this particular product and decided to prepare to enter the market for builders' products and, in particular, for galvanised steel lintels. With this in view they examined trade brochures issued by various manufacturers of steel lintels, including one published by Catnic. They decided that the Catnic lintel was the best; they were unaware that it was the subject-matter of a patent: so they copied it and manufactured it.

Your Lordships are not concerned with the first type of galvanised steel lintel (referred to in the courts below as "DH2") which Hill and Smith manufactured in consequence of what they had seen in Catnic's brochure. It was the subject of a writ issued by Catnic in March 1975 claiming an injunction and damages for infringement of patent, and this was subsequently amended to add a claim for damages for breach of copyright in certain of Catnic's drawings. DH2 was held at the trial by Whitford J. to infringe the patent and there was no appeal against this part of his judgement. He also found that there had been no breach of copyright, and, although this finding was contested unsuccessfully by Catnic in the Court of Appeal, no appeal has been brought to your Lordships' House from their endorsement of the learned judge's finding. Service of that writ, however, alerted Hill and Smith's Managing Director, Mr. Hodgetts, to the danger of infringement of Catnic's patent by galvanised steel lintels of the type DH2 that they were then engaged in introducing on the market. Coincidentally, one of their

first customers had complained that the Hill and Smith lintels, (in which the lower horizontal plate did not extend rearward beyond the point at which the vertical back plate joined it) presented difficulties in plastering the soffit. Hill and Smith then produced a modified design (referred to in the courts below as "DH4") which became the subject of the second writ. It was substantially in the form sketched below. Between this design and that described in Claim I of the patent the difference which is relied upon by Hill and Smith to save it from being an infringement, is that the back plate is not precisely vertical but is inclined at a slight angle to the vertical, viz. 6° in the case of the three-course module and 8° in the case of the two course module. Referring to the circumstances in which this modification to the previous design took place, the learned judge said: "I am in no doubt that the consideration chiefly working on Mr. Hodgetts' mind was avoidance of infringement, although it did meet [the customer's] complaint, and I accept that this was a further consideration operating in Mr. Hodgetts' mind." I apprehend, however, that your Lordships are concerned not so much with the motives for the alteration as with the effect of it.

Did the substitution of a back plate that was slightly inclined to the true vertical for one that was precisely vertical change what the patentee by his specification had made an essential feature of the invention claimed having regard to the patentee's description of the back plate in Claim 1 as "extending vertically".

The invention is a simple one; to understand what it does and how it works calls for no great technological or scientific expertise. It is designed for use by builders engaged in ordinary building operations; they constitute the readers to whom the specification is addressed. As any knowledgeable builder would know, indeed as would be known even by one of Lord Macaulay's schoolboys who had reached the triangle of forces in his study of elementary mechanics, a slight inclination from the vertical of an upright support reduces its load bearing capacity proportionately to the cosine of the angle of such inclination. Where that angle is 6° as in the Hill and Smith three-course module DH4 the reduction is 0.6 per cent., where it is 8° as in the two-course module the reduction is still only 1.2 per cent. From the point of view of function a reduction of this order in vertical support provided for the upper horizontal plate is negligible. Whitford J. held that on the proper interpretation of the claim the modified design DH4 did not amount to what he described as an "infringement in terms," but he went on to hold it to be an infringement under the "pith and marrow doctrine." The majority of the Court of Appeal (Buckley and Waller L.J.J.) disagreed with the learned judge on the application of the pith and marrow doctrine to the alleged infringement; the third member (Sir David Cairns) would have upheld his judgment. There was no discernible difference of opinion between the three members of the court as to the applicable law, which they derived principally from the speeches in this House in *Van Der Lely N. V. v. Bamfords Ltd.* - [1963]

R.P.C. 61 and Rodi and Weinenberger A. G. v. Harry Showell Ltd. - [1969] R. P. C. 367. Where they differed was as to the application of the law to the facts of the instant case. Buckley L.J. was of the opinion that although it was not in fact essential to the working of the invention that the back plate should be precisely vertical (i.e. at an angle of 90° exactly to the horizon) the patentee nevertheless by the language used in his specification had made such precision an essential feature of the monopoly he claimed. Waller L.J. regarded "vertical," and presumably also the adverb "vertically," as capable only of being used as a word of precision; and for him this was decisive against any claim for infringement by any lintel in which the back plate was not at an angle of 90° exactly to the horizon. Sir David Cairns expressed the view that DH4 was not "a textual infringement" of the patent, but held it to infringe the "pith and marrow" of Claim I.

My Lords, in their closely reasoned written cases in this House and in the oral argument, both parties to this appeal have tended to treat "textual infringement" and infringement of the "pith and marrow" of an invention as if they were separate causes of action, the existence of the former to be determined as a matter of construction only and of the latter upon some broader principle of colourable evasion. There is, in my view, no such dichotomy; there is but a single cause of action and to treat it otherwise, particularly in cases like that which is the subject of the instant appeal, is liable to lead to confusion. The expression "no textual infringement" has been borrowed from the speeches in this House in the hay-rake case, *Van Der Lely v. Bamfords*....

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 those novel features only that he claims to be essential that constitute the so-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.

The question, of course, does not arise where the variant would in fact have a material effect upon the way the invention worked. Nor does it arise unless at the date of publication of the specification it would be obvious to the informed reader that this was so. Where

it is not obvious, in the light of then-existing knowledge, the reader is entitled to assume that the patentee thought at the time of the specification that he had good reason for limiting his monopoly so strictly and had intended to do so, even though subsequent work by him or others in the field of the invention might show the limitation to have been unnecessary. It is to be answered in the negative only when it would be apparent to any reader skilled in the art that a particular descriptive word or phrase used in a claim cannot have been intended by a patentee, who was also skilled in the art, to exclude minor variants which, to the knowledge of both him and the readers to whom the patent was addressed, could have no material effect upon the way in which the invention worked....

In the bracelet case, *Rodi and Weinenberger A. G. v. Harry Showell Ltd.* (ubi sup.) where this House was more evenly divided, the difference between the majority and the minority appears to have turned upon their respective views as to whether the particular variant alleged to be an infringement, had a material effect upon what were claimed to be the advantages obtained by the patented invention - as to which they differed. In the third of the trilogy of leading cases in this House upon this topic, the ampicillin case, *Beecham Group Ltd. v. Bristol Laboratories Ltd.* - [1977] F.S.R. 215, the descriptive phrase was "an amino group in the alpha position." In the alleged infringing antibiotic, hetacillin, this amino group had been temporarily converted by a further chemical reaction into a molecular structure that was no longer an amino group; but the reaction was reversible and upon being put to use as an antibiotic, (which necessitated contact with water) it reverted to its original form as an amino group and in that form produced its prophylactic effects.

This House unanimously held that this temporary masking of the amino group amounted to an immaterial variant. It would be obvious to anyone skilled in the specialised art of selecting and synthesising polymers for use as antibiotics that the essential feature of the invention was that when put to use for its intended purpose, the product should have an amino group in the alpha position; and that, accordingly, the patentee's reference to this feature of his claim cannot have been intended by him to exclude products in which the amino group in that position was temporarily displaced during a period before the product was put to any prophylactic use. The essential features of the invention that is the subject of Claim I of the patent in suit in the instant appeal are much easier to understand than those of any of the three patents to which I have just referred; and this makes the question of its construction simpler. Put in a nutshell the question to be answered is: Would the specification make it obvious to a builder familiar with ordinary building operations that the description of a lintel in the form of a weight-bearing box girder of which the back plate was referred to as "extending vertically" from one of the two horizontal plates to join the other, could not have been intended to exclude lintels in which the back plate although not positioned

at precisely 90° to both horizontal plates was close enough to 90° to make no material difference to the way the lintel worked when used in building operations? No plausible reason has been advanced why any rational patentee should want to place so narrow a limitation on his invention. On the contrary, to do so would render his monopoly for practical purposes worthless, since any imitator could avoid it and take all the benefit of the invention by the simple expedient of positioning the back plate a degree or two from the exact vertical. It may be that when used by a geometer addressing himself to fellow geometers, such expressions descriptive of relative position as "horizontal, " parallel, " "vertical" and "vertically" are to be understood as words of precision only; but when used in a description of a manufactured product intended to perform the practical function of a weight-bearing box girder in supporting courses of brickwork over window and door spaces in buildings, it seems to me that the expression "extending vertically" as descriptive of the position of what in use will be the upright member of a trapezoid shaped box girder, is perfectly capable of meaning positioned near enough to the exact geometrical vertical to enable it in actual use to perform satisfactorily all the functions that it could perform if it were precisely vertical; and having regard to those considerations to which I have just referred that is the sense in which in my opinion "extending vertically" would be understood by a builder familiar with ordinary building operation. Or, putting the same thing in another way, it would be obvious to him that the patentee did not intend to make exact verticality in the positioning of the back plate an essential feature of the invention claimed.

My Lords, if one analyses line by line the ways in which the various expressions are used in the specification, one can find pointers either way as to whether in particular lines various adjectives and adverbs descriptive of relative position are used as words of precision or not. Some of these are discussed in the judgments of the majority of the Court of Appeal who found the pointers in favour of precision stronger than those to the contrary, of which one example is the description of the two "horizontal plates as being only "substantially parallel." For my part I find the result of such analysis inconclusive and of little weight as compared with the broad considerations to which I have referred and which are a consequence of giving as I think one should, a purposive construction to the specification. It follows that I have reached the same conclusion as the trial judge and Sir David Cairns, although not by the route of drawing a distinction between "textual infringement" and infringement of the "pith and marrow" of the invention. Accordingly I would allow the appeal.

The remainder of the House agreed with the speech of Lord Diplock.

For complete version see [1980] F.S.R. 60.