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*Nov. 24, 25

Dec. 14

HOECHST PHARMACEUTICALS OF CANADA LIMITED and FARBWERKE HOECHST AKTIENGESELLSCHAFT VORMALS MEISTER LUCIUS & BRUNING (*Plaintiffs*) .. APPELLANTS;

AND

GILBERT & COMPANY, GILBERT SURGICAL SUPPLY CO. LIMITED, JULES R. GILBERT LIMITED (*Defendants*) ..... RESPONDENTS.

ON APPEAL FROM THE EXCHEQUER COURT OF CANADA

Patents—Infringement—Validity—Claims too broad—Patent Act, R.S.C. 1952, c. 203.

The plaintiff companies instituted against the defendant companies an action for infringement of ten patents, of which the first issued on a parent application and the others on divisional applications for an invention entitled "Process of Preparing Benzenesulfonyl Ureas". All the patents related to defined new sulfonyl ureas, each patent claiming a different process of producing them. Each patent contained a claim (claim 10 in all but the last patent and claim 13 in the last patent) to a specific new sulfonyl urea, tolbutamide, whenever obtained by the process claimed in claim 1 of the patent. The unexpected utility stated in the patents was the capacity of lowering blood sugar levels. The defendants contended that the process claims in each of the patents were invalid as being too broad in their terms, and, in consequence, the claim to the substance tolbutamide could not stand for that reason. The action was dismissed at trial on the ground that the patents alleged to have been infringed were invalid. The plaintiff companies appealed to this Court.

Held: The appeal should be dismissed.

Claim 1 of each of the patents in question was too wide in scope. The claimants sought to cover every conceivable sulfonyl ureas of the class, and in so doing it had overclaimed and invalidated claim 1 in each patent. Claim 10 in the first 9 patents and claim 13 in the last patent could stand only upon the foundation of a valid process claim and that foundation did not exist here.

Brevets—Contrefaçon—Validité—Revendications trop étendues—Loi sur les Brevets, S.R.C. 1952, c. 203.

Les compagnies demanderesses ont institué contre les compagnies défenderesses une action pour contrefaçon de dix brevets, dont le premier avait été délivré sur une demande originale et les autres sur des demandes divisionnaires pour une invention intitulée «Process of Preparing Benzenesulfonyl Ureas». Tous les brevets se rattachaient à

*PRESENT: Abbott, Judson, Ritchie, Hall and Spence JJ.

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des nouvelles urées sulfoniques déterminées, chaque brevet revendiquant un procédé différent pour les produire. Chaque brevet contenait une revendication (revendication n° 10 dans tous les brevets excepté le dernier et revendication n° 13 dans le dernier brevet) d'une nouvelle urée sulfonique spécifique, tolbutamide, lorsque obtenue par le procédé revendiqué dans la revendication n° 1 du brevet. L'utilité imprévue énoncée dans les brevets consistait dans la capacité de diminuer le contenu de sucre dans le sang. Les défenderesses ont plaidé que les revendications des procédés dans chacun des brevets étaient invalides parce que trop étendues dans leurs termes, et, en conséquence, la revendication de la substance tolbutamide ne pouvait pas être supportée pour cette raison. Le juge au procès a rejeté l'action pour le motif que les brevets dont on alléguait la violation étaient invalides. Les compagnies demanderesses en appelèrent devant cette Cour.

Arrêt: L'appel doit être rejeté.

La revendication n° 1 de chaque brevet avait une portée trop étendue. Les requérants ont cherché à couvrir toutes les urées sulfoniques concevables de la classe et en ce faisant, ils ont revendiqué plus qu'ils avaient droit et ont rendu invalide la revendication n° 1 dans chaque brevet. La revendication n° 10 dans les 9 premiers brevets et la revendication n° 13 dans le dernier brevet ne pouvaient être supportées que sur la base d'une revendication de procédé valide et cette base n'existait pas.

APPEL d'un jugement du Juge Thurlow de la Cour de l'Échiquier du Canada[1], rejetant une action pour contrefaçon de brevets. Appel rejeté.

APPEAL from a judgment of Thurlow J. of the Exchequer Court of Canada[1], dismissing an action for infringement of patents. Appeal dismissed.

Christopher Robinson, Q.C., and *Russell S. Smart*, for the plaintiffs, appellants.

I. Goldsmith, for the defendants, respondents.

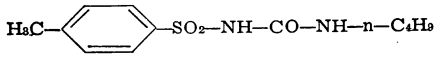
The judgment of the Court was delivered by

HALL J.:—This is an appeal from a judgment of Thurlow J. in the Exchequer Court of Canada[1], dismissing an action by the appellants for infringement of Patents No. 582,621 to 582,627 inclusive; 558,513; 558,514 and 590,201, being in respect of:

an invention entitled "Manufacture of New Sulphonyl Ureas". Each of the patents contains a claim (numbered 10 of the first 9 of the patents and numbered 13 in the last) which reads:

[1] [1965] 1 Ex. C.R. 710, 28 Fox Pat. C. 120.

The compound of the formula



whenever obtained according to claim 1 or the obvious chemical equivalent thereof

Patent No. 582,621 issued on a parent application which had its origin in what is called a priority document being an application for a patent of invention under the title "PROCESS OF PREPARING BENZENESULFONYL UREAS" filed at the Patent Office of the Federal Republic of Germany on August 8, 1955, by the appellant The Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. The other patents issued on divisional applications of that parent application which were filed pursuant to s. 38(2) of the *Patent Act*. In all respects material in this appeal, the disclosures of all the patents are identical.

All the patents relate to defined new sulfonyl ureas, each patent claiming a different process of producing them. Each of the processes produces the new substances by known methods from known materials, with the result that the patentability of the process depends on the possession of unexpected utility by the new substances produced. The unexpected utility stated in the patents is the capacity of lowering blood sugar levels, this being referred to as hypoglycemic activity. The process in each patent is claimed in claim 1 in relation to the production of all the new sulfonyl ureas. Each patent contains a claim (claim 10 in all but the last patent and claim 13 in the last patent) to a specific new sufonyl urea, tolbutamide, whenever obtained by the process claimed in claim 1 of the patent. It is upon this claim to tolbutamide in each patent that the appellant founded its action for infringement.

It is conceded that tolbutamide, standing by itself, could have been the subject-matter of a valid patent if claimed as such when prepared or produced by the methods or processes of manufacture particularly described and claimed in the patent or by their obvious chemical equivalent. It possessed the previously undiscovered useful quality as defined in *Re May & Baker Ltd. and Ciba Limited*[1] and adopted by this Court in *Commissioner of Patents v. Ciba*[2]. However, the

[1] (1948), 65 R.P.C. 255.
[2] [1959] S.C.R. 378, 19 Fox Pat. C. 18, 30 C.P.R. 135, 18 D.L.R. (2d) 375.

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respondents say that the process claims in each of the patents in question are invalid as being too broad in their terms, and, in consequence, the claim to the substance tolbutamide cannot stand for that reason.

Thurlow J. dealt with the substance tolbutamide in his judgment as follows at p. 713:

> The value and importance of tolbutamide lies in its usefulness in the treatment of diabetes. Until shortly before its introduction in the latter part of 1956 treatment of the common form of this illness, known as diabetes mellitis, consisted mainly, if not entirely, in putting the patient on a diet designed to bring about and maintain a proper level of sugar in his blood and if this was not successful or sufficient to accomplish the desired result, to administer insulin. Insulin could not be taken orally and thus had the disadvantages associated with administration by needle including those due to the reluctance of the patient and those due to his own shortcomings when administering it himself resulting in administering at times too much and at other times too little. Insulin also had undesirable effects on the tissue adjoining the site of injections carried out over a long period. Early in 1956 a substance known as carbutamide which was known to have blood sugar lowering activity, and which had bacteriostatic activity as well, came into use as an oral antidiabetic. The bacteriostatic activity was undesirable as it tended to destroy bacteria necessary to normal body functions and in October 1956 carbutamide was withdrawn from use in Canada and the United States apparently because of reported undesirable long term effects on the livers and kidneys of patients by whom it had been used. Tolbutamide had already been synthesized and, to some extent, tested before carbutamide was introduced and shortly before the latter was withdrawn it came into use in Canada for the same purpose. The evidence of Dr. J. B. R. McKendry satisfies me that tolbutamide has proven to be a satisfactory oral antidiabetic and has been of considerable value in the treatment of many cases where dieting alone has been insufficient to establish and maintain a proper blood sugar level. Since its introduction at least two other oral antidiabetics have come into use for the same purpose one of which, chlorpropamide, has more pronounced and longer lasting blood sugar lowering activity than tolbutamide but at the same time involves increased danger of undesirable long term effects. These substances are not suitable for the treatment of all types of diabetes nor are they effective for all patients or for what I shall call the severe cases of diabetes mellitis. For these insulin remains the standard remedy. But in a considerable proportion of the cases of diabetes mellitis tolbutamide is effective as a blood sugar lowering agent, and has the advantage of oral administration, and at the same time a satisfactory record of comparatively low toxicity and freedom from harmful side effects.

He then made an exhaustive review of the combinations possible, using the substances from which tolbutamide is produced, and concluded at p. 723:

> It will be observed that the number of mathematically conceivable substances embraced in the class defined in this claim is infinite. More than one hundred substances are conceivable by taking any one of the left hand or R substituents and applying all the possible variations of the finite class defined for the right hand or R^1 group. A group many times the size of

that number is also conceivable by applying it to the various substituents embraced within the finite portions of the left hand or R group. But in using the expressions "alkyl" and "alkoxy" and in embracing both single substituents in the phenyl ring in any of three positions and combinations of any two substituents in any two positions the language places no mathematical limit whatever on the number of carbon atoms or the formations thereof which such groups can have and thus makes the number of members of the class mathematically infinite. Nor is there evidence of how many members of this class are conceivable either as a matter of practical chemistry or for the purposes of practical commercial manufacture. As a matter of interpretation however it is in my opinion clear that the claim refers to every mathematically conceivable sulphonyl urea of the class for I can see no basis upon which anyone who might contrive to make a substance of the class, however inconceivable the preparation of such a substance may have been at the time of the drafting of the claim, could successfully maintain that his substance was not within the class. But even if the claim were read as referring only to those members of the class which as a matter of chemistry or even of commercial manufacture could conceivably be made, I see no reason to doubt that it would refer to a class many thousands strong.

The appellant did not seriously contest these findings, but maintained that insofar as the one substance in issue in the litigation, namely, tolbutamide, the patents were valid and were being infringed by the respondents.

In *C. H. Boehringer Sohn v. Bell-Craig Limited*[1], Martland J., in delivering the judgment of the Court, said at pp. 414-5:

> In the present case there was a claim to a process upon which the appellant relies as being a compliance with the subsection. That claim is claim 1, which is admittedly invalid because it is too broad in its terms and claims more than the appellant was entitled to claim. The question is whether a claimant can satisfy the requirements of s. 41(1) for a claim for a substance, if he has filed a broad process claim for the production of a whole genus of which the substance claimed is but one, if the process claim, because of its generality, is found to be invalid.
>
> In my opinion, he cannot meet the provisions of that subsection in that way. The subsection was intended to place strict limitations upon claims for substances produced by chemical process intended for food or medicine. Such a substance cannot be claimed by itself. It can only be claimed when produced by a particular process of manufacture. Not only that, the claimant must claim, not only the substance, but that very process by which it is manufactured. To comply with the subsection he must, therefore, make two claims. In my opinion this means that he must make valid claims to both the process and the substance, if he is to be entitled, successfully, to claim the latter. To interpret the subsection as meaning that all that is necessary is to file a claim for the process, valid or not, would be to defeat its purpose. A person who claims a substance within the subsection, supported only by a process claim which is invalid, is in no better position then was the respondent in the *Winthrop* (1948) S.C.R. 46, 2 D.L.R. 561, 7 Fox Pat. C. 183, 7 C.P.R. 58 case, who, while referring to a

[1] [1963] S.C.R. 410, 25 Fox Pat. C. 36, 41 C.P.R. 1, 41 D.L.R. (2d) 611.

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process, had not claimed it. In the *Winthrop* case the claimant had claimed too little. In the present case he has claimed too much. But the result in each case is the same in that there had been no claim filed which results in the claimant's obtaining a valid patented process for the production of the substance which he claims.

This statement applies to the present case. In challenging the validity of the patents in question, counsel for the respondents put his case upon the footing that no one could obtain a valid patent for an unproved and untested hypothesis in an uncharted field. This is what the appellant has tried to do in claim 1 of each of the patents. It has sought to cover, in the words of Thurlow J., "every mathematically conceivable sulphonyl urea of the class" and has consequently overclaimed, and, in so doing, invalidated claim 1 in each patent.

Accordingly, following *Boehringer* and *Winthrop*[1], claim 10 in the first nine patents and claim 13 in the last patent fall for they cannot stand except upon the foundation of a valid process claim and that foundation does not exist here.

The appeal should, therefore, be dismissed with costs.

Appeal dismissed with costs.

Solicitors for the plaintiffs, appellants: Smart & Biggar, Ottawa.

Solicitors for the defendants, respondents: Duncan, Goldsmith & Caswell, Toronto.