

## **BOMBAY HIGH COURT**

Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius

Vs.

Unichem Laboratories

Suit No. 132 of 1962

(Vimadalal, J.)

11.07.1968

### **JUDGMENT**

#### **Vimadalal, J.**

1. This is a suit for infringement of patent under Section 29 of the Indian Patents and Designs Act, 1911, filed by the plaintiffs who are the legal owners and proprietors of Indian Patent No. 58716 in respect of the manufacture of new sulphonylureas, salts of those compounds and of anti-diabetic preparations containing such compounds. The application for the said patent was made by the plaintiffs on 23rd October 1956 and was accepted on 7th November 1957, but the same took effect from the 8th of May 1956 by reason of the provisions of Section 78A of the Patents and Designs Act. One of the chemical compounds comprised in the said patent is Tolbutamide, and since 1957 the plaintiffs have been marketing the same as an anti-diabetic drug in India and all over the world under the trade mark "Rastinon." The suit was originally filed only against the present first defendants who, according to the Plaintiffs, have since May 1961 wrongfully and with full knowledge of the plaintiffs' said patent No. 58716 infringed the said patent by manufacturing, preparing and selling Uni-Tolbid tablets or Tolbutamide manufactured in accordance with and by the use of the invention disclosed in the plaintiffs' said patent "and claimed in Claims 1 and 11" thereof. The first defendants admit having manufactured or sold the said tablets under the name Uni-Tolbid or Tolbutamide but claim that the said tablets had been manufactured by the application of the processes mentioned in another patent, being patent No. 64323 held by the Haffkine Institute of Bombay which is owned by the present second defendant State, under a license granted to them by the second defendants for the manufacture and sale thereof. The second defendants have, by an order dated 6th February 1967, been made party defendants to this suit on their own application at their own costs throughout, but it may be mentioned that no relief has been claimed against them in the present suit by way of amendment of the plaint after their joinder. It appears that the business of the first defendants has, since the filing of the present suit, been acquired and taken over as a going concern by the third

defendants, being a company which was registered under the Companies Act on the 22nd of August 1962, and the third defendants have been manufacturing and selling Uni-Tolbid tablets or Tolbutamide ever since then as successors to the first defendants. The third defendants were, therefore, joined as party defendants to this suit by an order dated the 9th of January 1968, and by the amendments effected pursuant to the said order, the plaintiffs have claimed against the third defendants also the same substantive reliefs which they had claimed against the first defendants in the suit as originally filed. The reliefs claimed by the plaintiffs in the present suit against defendants Nos. 1 and 3 are, an injunction restraining them from infringing the plaintiffs' said patent No. 58716, an order for payment of a sum of Rs. 7,000/- as and by way of damages, or in the alternative, an order for an account of the profits made by defendants Nos. 1 and 3 from the sale of the infringing goods and for payment of the same to the plaintiffs, and for an order to deliver up to the plaintiffs for destruction of all articles in the possession of defendants Nos. 1 and 3 made in infringement of the plaintiffs' said patent.

2. On merits, the defense of the first defendants as disclosed by their written statement falls into two parts. First, that there is no infringement of the plaintiffs' said patent as they have not manufactured and prepared Uni-Tolbid tablets in accordance with or by the use of the invention disclosed in the plaintiffs' said patent, but have manufactured the compound Tolbutamide in accordance with a different process described in the second defendants' patent No. 64323 for the preparation of substituted benzenesulphonyl ureas from the corresponding substituted benzenesul-phonyl thioureas by desulphurisation with hydrogen peroxide; secondly that the plaintiffs' said patent No. 58716 is invalid and is liable to be revoked on the grounds of insufficiency of description, lack of novelty, want of inventive step and lack of utility, grounds which the plaintiffs would, under Section 29 (2) read with Section 26 of the Patents and Designs Act, be entitled to urge by way of defense to a suit for infringement like the present one. In addition to these two defences on the merits, the first defendants have pleaded the defenses of acquiescence, estoppel, and delay disentitling the plaintiffs to any relief, by reason of the failure of the plaintiffs to take action till 4th April 1962 when the present suit was filed. The third defendants who, as I have already stated earlier are successors to the business of the first defendants, have by their Written Statement adopted the first defendants' written Statement. The second defendants have filed a separate and detailed Written Statement in answer to the plaintiffs' suit, but they have also, in substance, adopted the same defences as are to be found in the Written Statement of the first defendants.

3. On these pleadings, the following issues were framed by me :-

1. Whether the manufacture of Uni-Tolbid tablets or Tolbutamide by defendants Nos. 1 and 3 is carried out by using the processes mentioned in the plaintiffs' patent No. 58716 as alleged in paragraph 6 of the plaint.
2. Whether the first and third defendants have been infringing and are infringing the plaintiffs' said patent No. 58716 as alleged in para 8 of the plaint.

3. Whether the plaintiffs' said patent No. 58716 is invalid and is liable to be revoked on the grounds stated in paragraphs 5 and 6 of the Written Statement of the first defendants and paragraphs 7 and 8 of the Written Statement of the second defendant.
4. Whether there has been acquiescence on the part of the plaintiffs in respect of the manufacture of Uni-Tolbid tablets and Tolbutamide by defendants Nos. 1 and 3 as alleged in paragraph 7 of the Written Statement of defendant No. 1, and paragraph 9 of the Written Statement of defendant No. 2.
5. Whether the plaintiffs are precluded and/or estopped from complaining of the infringement, if any, of the said patent No. 58716 as alleged in paragraph 7 of the Written Statement of defendant No. 1, and paragraph 9 of the Written Statement of defendant No. 2.
6. Whether the plaintiffs are not entitled to the relief for injunction and damages or an account of profits in the facts and circumstances and having regard to the plaintiff's conduct set out in paragraph 7 of the Written Statement of defendant No. 1.
7. To what relief, if any, are the plaintiffs entitled?

4. After evidence on behalf of the plaintiffs had been led and the plaintiffs' case closed by Mr. Blanco White, while opening the case of the defendants, Mr. Mistree stated that he proposed to examine 3 or 4 witnesses. After the examination of his first witness Dr. Krishnamurthi Ganapathi was concluded, Mr. Mistree, however, suddenly decided upon a change of strategy and closed his client's case, probably because he realized that his trump card had not yielded a trick. At the very commencement of his address, Mr. Mistree then stated that he accepted the evidence of Dr. Aumuller and Dr. Bander, and did not quarrel with the evidence of Dr. Lingnau. Mr. Mistree conceded that the evidence of Dr. Krishnamurthi Ganapathi, who was examined as an expert by him on behalf of the defendants, did not carry his client's case any further. When Mr. Mistree resumed his address on the next day, however, he did try to defend, to some extent, the evidence led by Dr. Krishnamurthi Ganapathi. The evidence of Dr. Krishnamurthi Ganapathi being of no assistance to the defence, as Mr. Mistree has himself conceded, I do not propose to deal with the same in the course of this judgment. I am, however, constrained to say that Dr. Krishnamurthi Ganapathi's evidence did not impress me at all. The record of his evidence on paper, does not perhaps convey the halting and shaky manner in which he gave that evidence. In contrast with the evidence of Dr. Krishnamurthi Ganapathi, it may be stated that I was considerably impressed by the cogent and confident as well as frank manner in which Dr. Aumuller and Dr. Bander gave evidence on behalf of the plaintiffs, and indeed, Mr. Mistree was unable to shake the evidence of either of those witnesses in the course of cross-examination. With these general observations, I will now proceed to deal with the issues framed by me.

5. Before dealing with the questions that arise in the present suit on the merits, it would be convenient to dispose of issues Nos. 4, 5 and 6 relating to acquiescence, estoppel and delay. It may be mentioned that according to the defendants the delay in the present case is a delay of about two years after the plaintiffs' letter dated 7th March 1960 to the first defendants, the present

suit having been filed on 4th April 1962, According to the plaintiffs, however, they could not be expected to take action till they came to know in or about May 1961 that the first defendants had placed on the market goods manufactured in infringement of their patent as recorded in their attorneys letter dated 31st May 1961. Mr. Blanco White for the plaintiffs argued that mere delay is no bar, except to relief by way of interlocutory injunction, and that in order to disentitle the plaintiffs to perpetual injunction at the hearing of an infringement action, there must be something more than mere delay. Quoting from the judgment of Harman LJ in the case of *Van der Lely v. Bamfords Ltd*<sup>1</sup>, at p. 81 it is stated in Terrell on the Law of Patents, (11th edn.) p. 363 para 940, ".....laches, while a bar to the obtaining of an interlocutory order would not bar the right to a perpetual injunction as 'there must be more than mere delay to disentitle a man to his legal rights'." In support of his argument Mr. Blanco

<sup>1</sup>(1964) 81 RPC 54

White has relied on the observation in the case of *Proctor v. Bennis*<sup>2</sup>, Cotton L. J. negating the plea of laches stated in his judgment in the said case (at pp. 355, 356) that the court does not interfere on interlocutory injunction unless the plaintiff has been prompt, but there was no question of interlocutory injunction in the case before him which was at the stage of the hearing of the action. Bowen L. J. in the course of his judgment in the same case (at p. 358) observed that in order to make out acquiescence which precluded the plaintiff from raising the question of the validity of the patent and the question of infringement of it by the defendants, it was necessary that the defendants should establish that the plaintiff stood by and knowingly allowed the defendants to proceed and expend money in ignorance of the fact that he had rights, and meant to assert such rights. In the case of *Vidal Dyes Syndicate Ld. v. Levinstein Ld*<sup>3</sup>, which was also cited by Mr. Blanco White, it has been stated by Fletcher-Moulton L. J. (at p. 259) in the judgment to be settled law that a patentee need not attempt to stop an infringement when he first learns of it, but the greater the interval between the granting of the patent and the trial of the action, the more carefully must the evidence be looked into lest the court be induced to take an erroneous view, either on the one side or the other, of the knowledge of the world at the critical date. In the later case of *Electrolux Ld. v. Electrix Ltd*<sup>4</sup>, Jenkins L.J. dealing with the question of delay, observed (at p. 40) that the defendants were not entitled to assume that the plaintiffs accorded them their consent to the infringement merely because the plaintiffs, knowing of the defendants' use of "Electrix", did nothing to enforce their right, and that if the defendants adopted the said mark on that assumption and without proper inquiry, they did so at their own risk. The position, therefore is that mere delay is no bar to the granting of relief by way of perpetual injunction at the hearing of the suit, unless there is something more than mere delay which has caused prejudice to the defendants. There is no averment to that effect in the pleadings in the present suit, and certainly no evidence whatsoever to prove that the defendants were prejudiced in any manner by the alleged inaction of the plaintiffs over a considerable period of time. That is the position in regard to the plea of acquiescence, as well as estoppel, and delay as a factor disentitling the plaintiffs to relief. Issues Nos. 4, 5 and 6 must, therefore, be answered in favour of the plaintiffs.

6. As stated by B. J. Wadia J. in the case of *Lallubhai Chakubhai v. Chimanlal Chunilal and Co*<sup>2</sup>, the question of infringement is a mixed question of law and fact. Section 3 (3) of the Indian Patents and Designs Act, 1911 lays down that an application for a patent must contain a declaration to the effect that the applicant is in possession of an "invention". Section 2 (8) of that Act defines "invention" as meaning any manner of manufacture and as including an improvement. Section 2 (10) of the said Act defines the term "manufacture" as including any art, process or manner of producing, preparing or making an article, and also any article prepared or produced by manufacture. Section 26 of the Act lays down the grounds on which a patent, can be revoked. Section 29 (1) provides that a patentee can file a suit in the nature of an infringement action against any person who, during the continuance of the patent, makes, sells or uses the invention without his license, or counterfeits it, or imitates it. Sub-Section (2) of that section further provides that every ground on which a patent may be revoked under Section 26 would be available by way of defense to a suit for infringement. Section 30 of the said Act lays

<sup>2</sup>(1887) 4 RPC 333

<sup>4</sup>(1953) 71 RPC 23

<sup>3</sup>(1912) 29 RPC 245

<sup>5</sup>37 Bom LR 665 at p. 668 : (AIR 1936 Bom 99 at pp. 100, 101)

down that no damages can be recovered in respect of the infringement of a patent if the defendant proves that at the date of the infringement he was not aware, or had no reasonable means of making himself aware, of the existence of the patent. Section 78A enacts that by virtue of a certain reciprocal arrangement with the United Kingdom, any person who has applied for protection for any invention in the United Kingdom would be entitled to claim that the patent which may be granted to him under the Indian Patents and Designs Act for the said invention should be in priority to other applicants and should have the same date as the date of the application in the United Kingdom.

7. Turning to the first three issues which embody the questions in controversy between the parties on the merits of the present case, it may be stated that issues Nos. 1 and 2 relate to the subject of infringement, whilst issue No. 3 relates to the question of the validity of the plaintiffs' patent No. 58716. I will proceed to deal first with the question of infringement which is the subject matter of issues Nos. 1 and 2. It was contended by Mr. Mistree for the defendants that the plaintiffs have led no evidence on issue No. 1 and they must therefore, fail on that issue, as well as on issue No. 2 which is consequential thereto. Mr. Mistree's contention was that there is nothing in the evidence on record to show that the manufacture of Uni-Tolbid tablets or Tolbutamide by defendants Nos. 1 and 3 was carried out by using the processes mentioned in the plaintiffs' patent No. 58716 and the plaintiffs have, therefore, not proved the alleged infringement of the said patent by defendants Nos. 1 and 3, the onus in regard to which lay on the plaintiffs. It is true that, as stated by Halsbury, (3rd edn.) Vol. 29 p. 106 para 218, the onus as to infringement lies on the plaintiff. In the Canadian Patent Act there is a specific statutory provision viz., Section 41 (2), which lays down that in an action for infringement where the invention relates to the production of a new substance, any substance of the same chemical composition and constitution shall, in the absence of proof to the contrary, be deemed to have been produced by the patented process of which it is alleged to be an infringement. Though there is no corresponding provision in the

Indian Patents and Designs Act, I see no reason why a presumption to the same effect should not be drawn by me against the defendants in the present case under the general provisions contained in Section 114 of the Indian Evidence Act, since it is admitted by the defendants that it is the very drug Tolbutamide, in respect of which the plaintiffs have obtained their patent No. 58716, that they have prepared and sold. Moreover, though the general burden of establishing the case of infringement undoubtedly rests on the plaintiffs as laid down in the statement from Halsbury mentioned above which is in accordance with Section 101 of the Indian Evidence Act, the burden of proving a particular fact viz., the process by which Tolbutamide is being prepared by the defendants would be on the defendants, since that is a fact "especially" within their knowledge within the terms of Section 106 of the Indian Evidence Act. It is impossible for the plaintiffs to know by what precise process Tolbutamide is being prepared by the defendants and it is precisely to that sort of a case that Section 106 is intended to apply. The defendants have not led any evidence whatsoever in regard to the same. That, however, is not all. The first question that arises is, what is the infringement complained of by the plaintiffs in the present suit. In the opening sentence of para 4 of the plaint it is no doubt stated in very wide terms that the first defendants have infringed the plaintiffs' said patent No. 58716. That averment is not limited to infringement of any particular claim or claims in the plaintiffs' said patent. In the following sentence of the said paragraph, however, it is stated that the first defendants have manufactured, prepared and sold Uni-Tolbid tablets or Tolbutamide manufactured in accordance with or by the use of the invention disclosed in the complete specification of the plaintiffs' said patent "and claimed in claims 1 and 11". It is not necessary for me to decide on a construction of the said paragraph of the plaint whether the latter averment should be read as restricting the general averment with which the said paragraph opens, as contended by Mr. Mistree for the defendants, in view of the fact that Mr. Blanco White has conceded that, on the suit as framed, the infringement that has been complained of is infringement only of claims Nos. 1 and 11 of the plaintiffs' said patent No. 58716. Counsel on both sides have argued this case throughout on that footing, and I must, therefore, proceed to deal with the same on the basis that the infringement complained of is infringement only of claims Nos. 1 and 11 of the plaintiffs' said patent.

8. As stated in Halsbury ((3rd edn.) Vol. 29 p. 6 para 8), a complete specification customarily begins, after the title, with a general preamble stating the subject to which the invention relates, followed by a detailed description of one or more embodiments of the inventions. The whole of that is known as the body of the specification. It is further stated in the said paragraph of Halsbury that the specification ends with the claims, delimiting the monopoly granted by the patent, and since they define the monopoly, they must, in the event of legal proceedings, be scrutinised with as much care as any other document defining a legal right, and require to be as carefully drawn. It is stated in another passage in Halsbury ((3rd edn.) Vol. 29 p. 10, paras 16 and 17) that the specification is to be read as a whole, and that the body of the specification should be read first. The claims must, however, be read as ordinary English sentences without incorporating into them extracts from the body of the specification, or changing their meaning by reference to the language used in the body of the specification, though the body of the specification should be

referred to for the purpose of resolving difficulties of construction occasioned by the claims when read by themselves. It is, therefore, clear that, in an infringement action, the main function of the court is to construe the claims which are alleged to have been infringed, without reference to the body of the specification, and to refer to the body of the specification only if there is any ambiguity or difficulty in the construction of the claims in question.

9. Before I deal with the plaintiffs' specification (Ex. A), it is in my opinion, necessary at this stage to give, what may conveniently be called, a glossary of the chemical terms which it is necessary to un- CO-NH. 2. Substitutions in the urea molecule can be made at both ends. Urea linkage is a sort of bridge formed by a urea molecule connecting two radicals so that the whole forms a urea. 'R' in the sulphonyl group (R. SO. 2) represents any organic radical, the term radical meaning any atom or group of atoms which has one or more free (i. e. unused) valencies. The names of most of the radicals. The terms "method" and "process" have been used indiscriminately at various places in standard works and in decided cases to mean the same thing, and in Terrel on the Law of Patents, 11th edn. at p. 13 there is a quotation from a decided case in which the meaning of the word "method" as well as of the term "process" is stated to be "a manner of manufacture". It is not necessary for me to arrive at a definite conclusion on this point as, in my opinion, the distinction sought to be made between those two terms makes no difference whatsoever for the purpose of the decision of the questions that arise in the present case.

10. I must now turn to the relevant portions of the specification of the plaintiffs' patent No. 58716 (Ex. A) which is the basis of their claim in this suit. The title of the specification is "Manufacture of New Sulphonyl-Ureas, Salts of those Compounds and of Antidiabetic Preparations containing such Compounds." The introductory portion of the specification then states that the invention comprised therein provides sulphonyl ureas of the general formula R-SO. 2-NH-CO-NH R. 1, in which R represents a phenyl radical with certain limitations in regard to the number of Carbon atoms, and R. 1 represents a Hydro-Carbon radical also with certain limitations in regard to the number of Carbon atoms. After indicating certain processes, the specification proceeds to state, in one of the later paragraphs, "in further processes for making the new compounds, the corresponding thiourea is first prepared, and sulphur is eliminated there from in a conventional manner." In a still later paragraph it is stated that when the synthesis of the desired sulphonylurea starts from a corresponding thiourea, the sulphur may be eliminated with a heavy metal Oxide or a salt thereof, e.g. an Oxide or salt of lead, copper or silver in an aqueous or alcoholic solution. Then follow three tables indicating the activity of the products of the invention on rabbits, dogs, and mice or rats, to which it is unnecessary to refer. This is followed by 40 examples which are meant to illustrate the invention, and the specification finally ends up with 32 claims, out of which it is necessary to refer only to claims Nos. 1, 11 and 22 for the purpose of this case. Claim No. 1 is in the following terms :-

"1. A process for the manufacture of sulphonylureas of the general formula R-SO. 2-NH-

CO-NH-R.1 in which R represents a phenyl radical which may contain one or two substituents selected from alkyl and alkoxy residues, the alkyl group of which containing at most 8 Carbon atoms, and halogen atoms, or represents an aliphatic or cycloaliphatic Hydro-Carbon radical containing 3 to 8 Carbon radicals (as Dr. Aumuller has pointed out, the word "radicals" here is a mistake and should be "atoms") and R. 1 represents an aliphatic or cycloaliphatic Hydro-Carbon radical containing 2 to 8 Carbon atoms, and of the salts thereof, wherein compounds of the formula R- SO. 2-X and Y-R.1 are reacted together in which X and Y are groups which on reaction together form a urea linkage as defined above or a linkage readily convertible thereto". Claim No. 11 is in the following terms :-

"11. A process as claimed in claim 1 wherein thioureas of the formula R -SO. 2- NH-CS-NH-R. 1 are treated with agents eliminating the sulphur, R and R. 1 having the meanings given above." Claim No. 22 reads as follows :-

"22. The compounds of the formula shown in Fig. 6 of the drawings, whenever obtained according to claims 1 - 15."

11. It may be stated that the formula shown in Figure 6 is the formula of Tolbutamide. As already stated above, in view of the admitted position, in the suit as framed, I am concerned in this case only with claims Nos. 1 and 11 which are in respect of what may be called 'process patents", but I have thought it appropriate to refer incidentally to claim No. 22 also, in which the patent claimed is of the substances resulting from the processes comprised in those claims and in the other claims mentioned therein. The plaintiffs' case is that claim No. 1 is the main claim which covers compounds obtained by the chemical reaction specified therein, either directly to form a urea linkage, or indirectly to form a linkage readily convertible into urea linkage. It is the plaintiffs' case that claim No. 11 falls within the latter part of claim No. 1, in so far as it deals with the processes by which thioureas are converted to the corresponding urea linkage by being treated with agents eliminating sulphur, the radicals R and R. 1 having for the purpose of claim No. 11 the same limitations in regard to the number of Carbon atoms as they are required to have for the purposes of claim No. 1. In my opinion, that is the proper construction of claims Nos. 1 and 11 and the position, therefore, is as stated by Mr. Blanco White, that claims Nos. 1 and 11 must stand or fall together and that if claim No. 11 is infringed, claim No. 1 must necessarily be infringed. It may be mentioned that Tolbutamide is one of the compounds which the plaintiffs claim to have prepared by the processes patented by them in their said patent No. 58716 which would in addition, comprise numerous other compounds which could also be prepared by those processes. Since the case of the first defendants in paragraph 4 of their Written Statement is that they are preparing the compound Tolbutamide by the process of desulphurisation of benzenesulphonyl thioureas with Hydrogen peroxide, in order to prove their case of infringement what the plaintiffs have to prove is that the process of synthesising the compound Tolbutamide by desulphurisation of benzenesulphonyl thioureas with Hydrogen peroxide is a process which would fall within claim No. 11. Mr. Mistree has stated that he does not contest the proposition that it makes no difference for the purpose of the present case whether the defendants purchase

thiourea, or prepare it themselves. Mr. Blanco White is, in my opinion, right when he contends that claim No. 11 is as a matter of plain language, - and that is how a claim should be construed as stated in the passage from Halsbury - referred to earlier wide enough to include desulphurisation of thioureas by any chemical substance, including Hydrogen peroxide which the defendants claim to use. Since claim No. 11 is unambiguous in its terms it would not, in my opinion, be right to seek to construe it by reference to anything stated in the body of the specification Ex. A. Mr. Blanco White has rightly contended that in view of the admissions made by the defendants in their Written Statement in the present case, it became unnecessary for the plaintiffs to lead any evidence at all to prove infringement on the part of the defendants. As stated in Section 58 of the Indian Evidence Act, facts which are admitted need not be proved. The admissions on which Mr. Blanco White has relied are to be found in paragraph 4 of the Written Statement of the first defendants, which has been adopted by the third defendant in its Written Statement. Those admissions are : (1) that the thiourea used as the starting material in their process is the very starting material mentioned in claim No. 11 of the plaintiffs' patent; though there is a formal denial, the Written Statement itself shows that, in point of fact, it is the same; (2) that the defendants have been synthesizing their drug by the process mentioned in the second defendants' patent No. 64323, which consists of the preparation of substituted benzenesulphonyl ureas from the corresponding substituted benzenesulphonyl-thioureas by desulphurisation with Hydrogen peroxide; (3) that the drug which is the end product is Tolbutamide which the defendants have been synthesising and selling; and (4) that Tolbutamide is one of a class of sulphonyl ureas. In my opinion, there can be no doubt that these facts admitted on the pleadings are sufficient to show that claim No. 11 in the plaintiffs' specification (Ex. A) is necessarily infringed by the defendants. Claim No. 1 covers both the direct as well as the indirect methods of manufacture of sulphonylureas. The fact that, as Dr. Aumuller has deposed, the plaintiffs in practice adopt the direct method in the production of Tolbutamide for sale is immaterial. The question is, not as to the method actually followed by the plaintiffs, but is whether the method followed by the defendants, which is an indirect method, is covered by any of the claims in the plaintiffs' patent. Even a cursory look at claim No. 11 is sufficient to show that it is wide enough to cover all methods of eliminating sulphur from thioureas, whether the desulphurisation is effected, by means of Hydrogen peroxide, or by the the use of any other substance. Whether claim No. 11, so widely worded, is valid in law is a totally different question which will be dealt with by me separately at the appropriate place later on. Suffment, and it is that claims Nos. 1 and 11 are not fairly based on the matter disclosed in the specification and are deliberately wide and vague, e.g. as the elimination of sulphur in the plaintiffs' specification is stated to be effected in a conventional manner and the conversion mentioned in claim No. 11 is to be effected by the use of "agents eliminating the sulphur". This is the same as grounds (e) and (f) in paragraph 6 of the first defendants' Written Statement and in clause (iv) of the particulars annexed thereto and marked No. "2". It may briefly be described as the ground of insufficiency of description. The third ground of alleged invalidity is to be found stated in Clause (a) of paragraph 6 of the Written Statement of the first defendants, and it is that the true and first inventor was not the applicant for the patent. No evidence whatsoever has been led in regard to this ground and no argument was

addressed by Mr. Mistree with regard to the same and this ground must, therefore, be treated as abandoned by the defendants. The fourth ground of alleged invalidity is that the invention claimed by the plaintiffs was not new. This ground which may be stated briefly to be the ground of want of novelty is to be found in Clause (b) of paragraph 6 of the first defendant's Written Statement and in Clause (1) of the particulars annexed thereto and marked No. "2". The fifth ground of alleged invalidity is that it does not involve any inventive step. It is to be found in Clause (c) of paragraph 6 of the first defendants' Written Statement read with clauses (i) and (ii) of the particulars annexed thereto and marked No. "2". It may be subdivided into two contentions, (a) that the methods of manufacture are old, and (b) that carbutamide was already known. The sixth ground of alleged invalidity is that the plaintiffs' invention is of no utility. This is to be found in Clause (d) of paragraph 6 of the first defendants' Written Statement read with Clause (iii) of the particulars annexed thereto and marked No. "2". The last ground of alleged invalidity is to be found in Clause (g) of paragraph 6 of the first defendants' Written Statement, but when one refers to that ground as pleaded in Clause (g) of paragraph 8 of the written statement of the second defendants, read with Clause (iii) of the particulars annexed thereto and also marked No. "2", it is clear that it is nothing different from the ground of want of utility already mentioned above. In fact, it may be stated that all the grounds of alleged invalidity set out above are also to be found in the Written Statement of the second defendants and are based on Section 26 of the Indian Patents and Designs Act which the defendants are entitled to avail themselves of in view of sub-section (2) of Section 29 of that Act.

13. From what is discussed in the preceding paragraph it will therefore, be clear that the main heads of the alleged invalidity of the plaintiffs' patent on which the defendants rely by way of defence are only four viz., (i) insufficiency of description; (2) want of novelty; (3) no inventive step and (4) want of utility. It may be stated that the onus in regard to all objections to validity lies on the defendant (Halsbury, (3rd edn.) Vol. 29 p. 106 paragraph 218). I shall now proceed to deal with each of those grounds.

14. Dealing first with the ground of insufficiency of description it is stated in Halsbury, (3rd edn.) Vol. 29 p. 64 para 131 that the claim need only be as clear as the subject admits, and that a patentee need not so simplify his claim as to make it easy for infringers to evade it. It is further stated in that passage in Halsbury that the patentee's duty is not to prevent all possible argument as to whether there is or is not infringement in particular cases, but to enable the court to formulate the questions of fact to be answered. It is further stated in the same Volume of Halsbury (p. 66 para 138) that insufficiency of description has two branches, (1) the complete specification must describe "an embodiment" of the invention claimed in each of the claims and that the description must be sufficient to enable those in the industry concerned to carry it into effect "without their making further inventions"; and (2) that the description must be fair i.e. it must not be unnecessarily difficult to follow. Turning first to claim No. 11 in the present case in the light of these principles, the reference in the body of the specification to "a conventional manner" of eliminating sulphur cannot really create any difficulty, and it is in fact unnecessary to

import this from the body of the specification into claim No. 11 in view of the fact that claim No. 11 is unambiguous and clear in terms, being wide enough to include all methods of eliminating sulphur. As stated earlier in this judgment, it is permissible to refer to the body of the specification only when there is some difficulty or ambiguity in the construction of a claim as it stands. In any event, Hydrogen peroxide as a desulphurising agent would be an obvious chemical equivalent of heavy metal oxides or a salt thereof in an aqueous or alcoholic solution which are also used for desulphurising in "a conventional manner". Moreover, the secret or discovery essential to the validity of the plaintiffs' invention, as claimed, and forming the very basis of it is not the method, but is the previously undiscovered fact of a new class of chemical compounds having hitherto unsuspected blood-sugar-lowering properties, twenty-one methods of synthesis of sulphonylureas being already known at the material time as is apparent from p. 27 of Kurzer's article on sulphonylureas and sulphonylthioureas in Vol. 50 of the Chemical Reviews (Ex 1). There is no evidence led by the defendants to show that the statement in the body of the specification that the synthesis of the desired sulphonylurea may be obtained by eliminating sulphur with a heavy metal oxide or a salt thereof in an aqueous or alcoholic solution would present any difficulty. The specification and claims are addressed to those with a high degree of knowledge of the field of science to which they relate, particularly when they relate to chemistry and allied subjects. It is not necessary to describe processes in the Claims to a Specification when they are part of the common knowledge available to those skilled in the science who can, after reading them, refer to the technical literature on the subject for the purpose of carrying them into effect. "An embodiment" of the invention is, therefore, in my opinion, sufficiently described in the plaintiffs' patent and that description is not unnecessarily difficult to follow, it being sufficient to enable the invention to be carried into effect "without making further inventions". As far as claim No. 1 is concerned, there are as many as 40 examples of it in the specification (Ex. A) and there would, therefore, be no difficulty in carrying the same into effect. The ground of insufficiency of description alleged by the defendants must, therefore, fail.

15. That brings me to the next ground of alleged invalidity of the plaintiffs' patent viz. want of novelty. The test of novelty as formulated by Halsbury, ((3rd edn.) Vol. 29 p. 27 para 58) is in the following terms : "To anticipate a patent, a prior publication or activity must contain the whole of the invention impugned; i.e., all the features by which the particular claim attacked is limited. In other words, the anticipation must be such as to describe, or be an infringement of the claim attacked." The starting materials for the purpose of claim No. 11 were the thioureas corresponding to the ureas invented and claim No. 11 itself states in specific terms that the radicals R and R. 1 in the formula of the thioureas set out therein must have the meanings given to them in claim No. 1. That would mean that the radical R must be limited in regard to the number of Carbon atoms in the manner stated in claim No. 1, and the radical R. 1 must also be limited in regard to the number of Carbon atoms in the manner stated in claim No. 1. Dr. Aumuller was asked in examination-in-chief a question as to why the radicals R and R. 1 in the specification (Ex. A) are limited in the manner therein stated, and his answer was "because only such products had been taken into the patent which lower the blood-sugar", or in other words for

obtaining a hypoglycaemic effect particular radicals were selected by a process of testing on animals. It would follow that if the Carbon atoms in R. or R. 1 were more or less than the number specified in claim No. 1, hypoglycaemic property would not be obtained, and that has been stated explicitly by Dr. Bander in the course of his examination-in-chief. The evidence on record shows that it was known that amino-sulphonamides had anti-diabetic properties. Many sulphonyl-ureas were also known, but they were all with the wrong radicals at either end and it was not known that they could have anti-diabetic properties if they were activated by certain radicals. That was the prior art and, in that state of knowledge, it was not possible for a skilled chemist to predict that the combining of the two starting materials mentioned in the plaintiffs' patent would produce compounds which would have hypoglycaemic properties. The idea which is new in the plaintiffs' patent is the discovery that a useful anti-diabetic preparation could be obtained by constructing a molecule with a sulphonylurea in the middle and carefully planned lumps of radicals at either end. The novelty in the plaintiffs' patent lies entirely in the R and R. 1. What is new in the plaintiffs' patent is that it was discovered that it was possible to have the desired anti-diabetic properties, without producing undesirable toxic or anti-bacterial effects of known sulphonamides like I. P. T. D., by modifying the structure of the sulphonylurea in a particular way. The way in which that new idea was sought to be applied was (1) to select proper material having certain characteristics; (2) to react them together and (3) to obtain the product, directly or indirectly. I therefore hold that the objection to the validity of the plaintiffs' patent on the ground of want of novelty must stand rejected.

16. That brings me to the next ground of the alleged invalidity of the plaintiffs' patent viz. that it does not comprise any inventive step. As already stated above, this would have to be considered under two sub-heads, (a) that the methods of manufacture are old, and (b) that carbutamide was already known at the material time. As far as the first of those sub-heads is concerned the principles to be applied by the court in regard to the same are to be found well-formulated by Jenkins J. in the leading case of in the matter of the Letters Patent granted to May and Baker Ltd. and Ciba Ltd., (1948) 65 RPC 255 at p. 281, they are as follows :-

"Before referring to this evidence, I should, I think, endeavour to state the principles on which, and limits within which, an invention consisting of the production of new substances by known methods from known materials can be supported from, the point of view of subject-matter. I understand them to be these :-

(i) An invention consisting of the production of new substance from known materials by known methods cannot be held to possess subject-matter merely on the ground that the substances produced are new, for the substances produced may serve no useful purpose, in which case the inventor will have contributed nothing to the common stock of useful knowledge (the methods and materials employed being already known) or of useful materials (the substances produced being, ex hypothesis, useless).

(ii) Such an invention may, however be held to possess subject-matter provided the substances produced are not only new but useful, though this is subject to the qualification

that the substances produced must be truly new, as opposed to being merely additional members of a known series (such as the homologues) and that their useful qualities must be the inventor's own discovery as opposed to mere verification by him of previous predictions.

(iii) Even where an invention consists of the production of further members of a known series whose useful attributes have already been described or predicted, it may possess sufficient subject-matter to support a valid patent provided the somewhat stringent conditions prescribed by Maugham J., as he then was, in *I. G. Farbenindustrie A. G.'s Patents*, (1930) 47 RPC 289 as essential to the validity of a selection patent are satisfied, i. e. the patent must be based on some substantial advantage to be gained from the use of the selected members of the known series or family of substances, the whole (or substantially the whole) of the selected members must possess this advantage, and this advantage must be peculiar (or substantially peculiar) to the selected group."

It is the contention of Mr. Blanco White that the plaintiffs' case falls within principle (ii) formulated by Jenkins J. The mere fact that the methods adopted are known methods cannot, therefore, lead to the conclusion that there is no inventive step. As stated by Jenkins J. himself in his judgment in the said case (at p. 279), in view of the fact that the methods described in the specification, were in themselves known methods, the respondents could only claim novelty for them as part of the entire process consisting of their application to the particular classes of materials described in the specification so as to produce the new substances claimed. If the useful qualities of the new substances produced are the inventor's own discovery, that would be sufficient to repel the objection that there is no inventive step. The objection on the ground which I am now discussing, therefore, ultimately resolves itself into a consideration of the utility of the plaintiffs' invention which will be dealt with by me separately as the last head on which the validity of the plaintiffs' patent is being challenged by the defendants in the present suit. The second sub-head of objection which I am now considering which is based on the fact that carbutamide was already known at the material time and the blood-sugar-lowering qualities of the compounds to which the plaintiffs' patent relates were therefore obvious may, however, be disposed of here. The test of 'obviousness' is laid down with characteristic lucidity in Halsbury ((3rd edn.) Vol. 29 p. 42 para 95) in the form of a question - "Was it for practical purposes obvious to a skilled worker, in the field concerned, in the state of knowledge existing at the date of the patent to be found in the literature then available to him, that he would or should make the invention the subject of the claim concerned?" It is further stated in Halsbury (p. 43 para 96) that an invention usually involves three stages, (1) the definition of the problem to be solved, or the difficulty to be overcome; (2) the choice of the general principle to be applied in solving the problem overcoming the difficulty; and (3) the choice of the particular means to be used. It is further stated in the said paragraphs that merit in any one of these stages, or in the whole combined, may support the invention, and it is, therefore, probably more important to consider the advance in knowledge due to the inventor rather than to examine in detail the variations from the former product. In order to support this objection, it is necessary for the defendants to show

in the present case that carbutamide was known in India. If the plaintiff could show that it was not obvious to a man in the art, like the director of the Haffkine Institute, even after notionally putting in his hands standard works like Houben-Weyl and the article by Kurzer in Vol. 50 of the Chemical Reviews (Ex. 1) as well as other scientific material on the subject then available in India, that he would or should make the invention which is the subject of the plaintiffs' patent, the defendants' objection now under consideration must fail. As Mr. Blanco White has stated, there is no evidence which Mr. Mistree has been able to point out to the court to show that Carbutamide was known in India at the material time. That, by itself, would be sufficient to dispose of the defendants' objection on that score. Mr. Blanco White however, proceeded to deal with this objection on the alternative footing of carbutamide being known in India at the material time and contended that, even so, the defendants' objection on this ground must fail. In that connection he relied on the evidence of Dr. Aumuller given in examination-in-chief which was as follows :-

Q. Assuming the knowledge common to the chemist in 1956, the knowledge of the article by Kurzer, the knowledge of IPTD, and the knowledge of carbutamide, would you have known all the possible blood-sugar-lowering properties of sulphonyl ureas?

A. I would have known nothing of those properties of sulphonyl ureas other than those of the type of Carbutamide, with an amino group in the para position. It may be mentioned that carbutamide is itself a sulphonylureas, but IPTD is not a sulphonylurea. There is no cross-examination of Dr. Aumuller on this point, though he has been cross-examined by Mr. Mistree in regard to the difference in the chemical composition of carbutamide as compared with Tolbutamide. In order to appreciate the evidence which I am now discussing, it would be convenient, at this stage, to point out the difference between the respective chemical compositions of Carbutamide and Tolbutamide. The molecular formula of Carbutamide is :-

NH. 2-C.-6 H. 4-SO. 2-NH-CO- NH-C. 4 H. 9 The break-up of this formula would be as follows :-

NH 2 -Amino group C. 6 H. 4 - Benzene ring

Forming the radical R. SO. 2-NH-Co NH - Sulphonyl-urea group with hypoglycaemic properties, of which NH-CO-NH is the urea group. C. 4 H. 9 - Butyl group forming the radical R. 1. Carbutamide which was developed early in 1955 was found to have hypoglycaemic properties, but was withdrawn from the market by 1957 as it was found to be unsuitable for prolonged administration on account of its toxic effects. Long before Carbutamide was developed, it was known that some sulphonamide drugs (sulpha drugs) had blood sugar lowering properties, but they could not be used for the treatment of diabetes because they had toxic effects and were therefore unfit for prolonged administration. The plaintiffs' case is that, in the meantime, Dr. Aumuller, who was employed by them, carried on research and found that if, instead of attaching the amino group (NH. 2) to the benzene ring, the methyl group (CH. 3) was attached to it in the radical R, it would, whilst preserving the hypoglycaemic effect, not have toxic effect. He accordingly discovered the new compounds containing the methyl radical which

form the subject-matter of the plaintiffs' patent (Ex. A) in the present case, Tolbutamide being one of them. The molecular formula of Tolbutamide, therefore, is :-

CH. 3-C. 6 H. 4-SO. 2- NH - CO- NH C. 4 H. 9 The break-up of that formula is as follows :-

CH. 3-Methyl group C. 6 H. 4-Benzene ring Forming the radical R. SO. 2-NH-CO - NH - Sulphonylureas group with hypoglycaemic properties, of which NH-CO-NH is the urea group. C. 4 H. 9 -Butyl group forming the radical R. 1.

It is therefore clear that the only difference in the respective chemical compositions of Carbutamide and Tolbutamide is that the latter has the methyl group (CH. 3) in place of the amino group (NH. 2) which occurs in the former in the para position in the radical R, as Dr. Aumuller himself has admitted. That, however, is the crux of the plaintiffs' invention to which patent No. 58716 relates. The substitution of CH. 3 in the para position for NH. 2 was the inventive step. It was a novel idea and the plaintiffs' patent therefore embodies a new and useful composition of matter, or at any rate, a new and useful improvement in it. It was not a thing which just any person working in this field would try, but it required extensive research. As observed in the Irish judgment to which I will refer later on. Courts of law must guard against the common human failing of being wise after the event in regarding something that has been discovered by research as obvious. Dr. Bander has stated in examination-in-chief that though sulphonylureas were known prior to the invention in suit, it was not known that if they were activated by certain radicals they would have blood sugar reducing properties. The use of sulphonyl-ureas with radicals on either side with certain limitations in regard to Carbon atoms so as to obtain hypoglycaemic properties would itself be an addition "to the common stock of useful knowledge within the May and Baker's case, (1948) 65 RPC 255 at p. 281. In the course of cross-examination Dr. Bander has stated that the group SO. 2 -NH -CO - NH is common both to Tolbutamide as well as carbutamide and he then proceeded to depose. "It is true that, therefore that blood sugar reducing effect of Tolbutamide is obvious," which, he proceeded to clarify, must mean obvious to a man who had knowledge of the sulphonylurea group. That statement of Dr. Bander was strongly relied upon by Mr. Mistree on behalf of the defendants in support of the point I am now considering, but as Mr. Blanco White has rightly pointed out, Mr. Mistree has not elicited from Dr. Bander the point of time at which the blood sugar reducing effect of Tolbutamide became obvious to him. At any rate, as already pointed out above, there is no evidence to show when it must have become obvious in India, in view of the fact that evidence has not been led to prove when carbutamide became known in India. There is no evidence to show that it was known that the blood sugar lowering property of carbutamide lay in its sulphonylurea. In view of this position, as appearing in the evidence on record. I am affraid the statement of Dr. Bander that the blood sugar reducing property of Tolbutamide "is obvious" cannot really help the defendants to sustain the objection based on obviousness on the ground of alleged knowledge of carbutamide, and the same must be rejected.

17. That brings me to the most important part of the present case and that is the objection to the validity of the plaintiffs' patent on the ground of want of utility, which would also cover the other objection, already referred to by me, based on the ground that the methods of manufacture comprised in the plaintiffs' patent are old, an objection which also rests in the ultimate analysis, on the decision in regard to the question of utility. The first question that arises in regard to the subject of the utility of the plaintiffs' patent is what is the quantum of utility required to support a patent. Reference may be made in that connection to the statement in *Patents for Inventions* by T. A. Blanco White (the learned Counsel appearing for the plaintiffs in the present case), 3rd edn., at pp. 152-153 to the effect that in the absence of any promise in the specification that a definite degree of advantage would result from the use of the invention, the amount of utility required to support a patent is very small. It is further stated in the said passage that it is, in particular, not necessary that the invention as described should be commercially useful, unless the specification promises that it would be, and that it is sufficient that that invention should, by reason of the features that distinguish it from earlier proposals, be of some use to the public. It is further stated that it is not necessary that a new result should be obtained by using the invention, and that the test is whether the new method "gives the public a useful choice." In support of that proposition, the learned counsel for the plaintiffs relied on the decision in the case of *Welsbach Incandescent Gas Light Co. Ltd. v. New Incandescent (Sunlight Patent) Gas Lighting Co. Ltd.*<sup>6</sup>, in which the patent in question was for a gas light mantle, which though stronger than the gaslight mantles under an earlier patent, shed less candle power of light than those mantles. It was subsequently discovered that while the patented light had low illuminating power, a small proportion of another chemical substance added to it gave very great improvement in candle power. It was contended on behalf of the defendants to the said action for infringement that since the illuminating methods produced under the patent would give less light, it was not an improvement at all on the mantles prepared under the earlier patent, but was as falling off from it. It was observed in the judgment in the said case (at p. 251) that there were two answers to the objection raised by the defendants. The first was that the patent in question did not claim to be an improvement on the earlier patent but to give a "useful choice"; and the second was that if the matter had to be decided by the value of the mantle as an illuminating appliance alone the contention might be well founded, but there were advantages other than brilliancy and the new discovery produced illuminating appliances which had other qualities, viz. rigidity, flexibility or durability. Judged by these tests, the position is that the plaintiffs' patent in the present case cannot be attacked on the ground of want of utility, since it certainly gives a useful choice" in the matter of compounds with a blood sugar lowering property which was not known till then, unless by the specification (Ex. A) a higher degree of utility was promised by the Plaintiffs. In the course of the evidence led before me, the defendants have not been able to point out a single compound which would fall within the patent, but which did not have blood sugar lowering property, and all that they were able to point out was that some of those compounds were weaker than others, a point which is of no relevance for the purpose of the present case. I must, therefore, proceed to consider what is the utility promised in the specification (Ex. A) for the compounds falling within it? A careful scrutiny of the specification (Ex. A) shows that all that is promised

therein is, (1) that all the compounds falling within the plaintiffs' patent would lower the blood-sugar and (2) that they are not sulphonamides and avoid the difficulty of the administration of sulphonamides, viz, the causing of allergy as well as their bacterio-static activity. As far as their toxicity is concerned, what is stated in the specification (Ex. A) is that their acute toxicity (tested on mice or rats) was as set out in Table No. III appended thereto. Mr. Blanco White has submitted that there is no statement contained in the specification (Ex. A) by way of promise that any of the compounds falling within the patent is safe for human beings. It is no doubt stated in the said specification that the compounds of the invention are "usually extremely well-tolerated", and that extensive clinical tests performed on numerous patients had

<sup>6</sup>(1900) 17 RPC 237

demonstrated good tolerance of the compounds. It is common ground that the expression "well-tolerated" means that it had no strong side effects. It was sought to be contended by Mr. Mistree for the defendants that it was, therefore, claimed in the specification (Ex. A) that all compounds falling within the patent had no toxic effect, which would be one of the side effects to be guarded against. Mr. Mistree has contended that he has established by the evidence of Dr. Bander that it could not be predicted whether a particular sulphonyl urea falling within the patent would be safe to administer to a human being, and that he could not predict tolerability in human beings by experimenting on animals, and the plaintiffs' patent must, therefore, be held to be invalid on the ground of want of the utility claimed for it in the specification (Ex. A). I am afraid, however, the statements in the specification on which Mr. Mistree has relied cannot be torn from their context. It is quite clear from the specification itself that extensive tests for toxicity of the compounds falling within the patent had been performed on mice or rats. The statement that extensive clinical tests performed on numerous patients had demonstrated good tolerance of those compounds, when read in the context of the earlier statement in the said specification that the said compounds are "usually" extremely well-tolerated, shows that it is intended to apply only to such of the compounds as had been subjected to clinical tests. I, therefore, hold that there is no claim in the specification (Ex. A) in regard to utility of the compounds falling within the patent which has been disproved by the evidence led in this case.

18. Strong reliance was placed by Mr. Mistree for the defendants on the judgment of the Supreme Court of Canada reported in (1966) SCR 189, confirming the decision of the Exchequer Court of Canada reported in (1965) 1 Ex. CR 710, in regard to the patent which the plaintiffs had obtained in Canada in respect of the very processes of which the plaintiffs have obtained the patent in question in this country, Tolbutamide being one of the compounds falling within both the Canadian patent as well as the patent in this country. In the action in the Exchequer Court of Canada, the plaintiffs to the present suit who were also party plaintiffs there, had prayed for an injunction and other reliefs in respect of the alleged infringement of ten patents, a printed copy of one of which viz. patent No. 590201 has been tendered and marked Ex. 2 in the present proceedings. The defendants to the said suit had sold through out Canada Tolbutamide in alleged infringement of the plaintiffs' said patents. The sale of Tolbutamide by them was admitted by the defendants, but they pleaded that claims Nos. 1 and 10 of nine of the said patents and claims

Nos. 1 and 13 is of patent No. 590201 were invalid for a number of reasons. If one scrutinizes the Canadian patent No. 590201 (Ex. 2), claim No. 1 therein was, as Mr. Mistree has rightly contended, a combination of claims Nos. 1 and 11 in the present case, the validity of which has been questioned before me. It was not disputed that claim No. 10 in the first nine of the Canadian patents and claim No. 13 in Canadian Patent No. 590201 (Ex. 2) related to the compound Tolbutamide itself. It contained the same formula as in Fig. 6 of the specification (Ex. A) in the present case, and referred to a compound of that formula whenever obtained according to claim No. 1 or the obvious chemical equivalent thereof. I do not, however, accept the contention of Mr. Blanco White that claim No. 1 in the Canadian patent is different in material respects from claim No. 1 in the present case, merely because there is no limitation in the Canadian patent in regard to Carbon atoms as far as alkyl, alkoxy and halogen are concerned. It is admitted by the plaintiffs' own witnesses in the present case that if R and R. 1 are varied simultaneously, and three different positions viz. ortho, meta and para are used in respect of each mono-substituent the possible number of sulphonyl-ureas that could be prepared according to claim No. 1 of the plaintiffs' patent (Ex. A) would run into millions. The whole contention of Mr. Mistree is that claim No. 1 of the plaintiffs' patent No. 58716 is invalid because it covers millions of compounds which have not been tested in respect of their utility, and it is in support of that contention that Mr. Mistree has relied on the Canadian case. Merely because, under the Canadian patent, the permutations and combinations would run perhaps into some thousands or some millions more by reason of the absence of any limitation with regard to Carbon atoms as far as alkyl, alkoxy and halogen are concerned, would make no difference as far as the ratio of the decision in the Canadian case is concerned. In my opinion, therefore, the decision in the Canadian case cannot be distinguished on facts from the present case. Even so, I must proceed to consider whether I should follow the same, as decisions of Canadian courts do not bind me. In the trial court, Thurlow J. in his judgment dealt with the question of validity of claim No. 1 of the plaintiffs' Canadian patent. He observed (at p. 728) that there could not be an invention in a process which consists in applying a known method of reaction to a limitless class of known materials to produce an equally limitless class of expected products, when all that can properly be said of such products is that some of them have utility and others, the identity of which is not known, may have it as well, but that the infinite majority of the substance of the class have never been made or tested by anyone. He held (at p. 734) that it is highly improbable that all, or substantially all, of the members of the infinitely large class defined in claim 1 of the ten patents have either the blood sugar lowering activity to a useful extent or the freedom from toxicity or harmful side effects necessary to render them useful. He, therefore, came to the conclusion (at p. 734) that there was no invention as claimed in claim No. 1 of each of the said patents which was, therefore, invalid. He further held that by reason of the provisions of Section 41 (1) of the Patent Act of Canada, a substance patent would be valid only if accompanied by a valid process patent, and that in view of the invalidity of claim No. 1 of each of the ten patents which contained the process patent, the substance patent in claim No. 10 in the first nine patents and claim No. 13 in patent No. 590201 must also be held to be invalid. In view of that conclusion, the learned Judge held that it was unnecessary for him to consider the issue of infringement, and he accordingly

dismissed the plaintiffs' action with costs. On appeal to the Supreme Court of Canada from the decision of the Exchequer Court of Canada, it was held (at p. 191) that all the patents related to processes which produced new sulphonyl-ureas by known methods from known materials, with the result that the patentability of the process depended on the possession of unexpected utility by new substances produced, and that the unexpected utility stated in the patents was the capacity of lowering blood sugar levels which is referred to as hypoglycemic activity. In the opinion of the Supreme Court (at p. 194), what the appellant had tried to do in claim No. 1 of each of the patents was to obtain a patent for an unproved and untested hypothesis in an uncharted field which could not be held to be valid. The Supreme Court agreed with the trial court that the appellant had consequently over claimed, and, in doing so, had invalidated claim No. 1 in each of the patents before them. The Supreme Court also confirmed the decision of Thurlow J. that if claim No. 1 failed, the remaining claims in the patents in question must also fail. Mr. Blanco White has submitted that he has no quarrel with the decision of the Supreme Court, but that the decision of the Exchequer Court goes a little too far in so far as it relies merely on the possible number of compounds that would be comprised in claim No. 1. Mr. Blanco White contended that the Supreme Court of Canada had, however, not gone merely on numbers, but had proceeded to decide the case on the principle that the validity of the patents in question depended on the possession of unexpected utility by the new substances produced, and had invalidated the plaintiffs' patents on the ground that the limitless class of compounds comprised in them remained uncharted and unexplored. Mr. Blanco White has submitted that the decision in the Canadian case is not applicable to the present case, because there is evidence in the present case of systematic exploration by way of research leading to the establishment of the blood sugar lowering properties of all the compounds falling within the plaintiffs' patent. That evidence consists in the present case of the oral evidence of the plaintiffs' expert witnesses, and documentary evidence in the form of the chart (Ex. B) as filled in by Dr. Aumuller, evidence which I accept as reliable. As a result of that research, the necessary limitations in regard to the Carbon atoms in the radicals R and R. 1 were discovered, which in its turn led to the invention that all compounds with those limitations had blood sugar lowering properties and other compounds without those limitations did not have blood sugar lowering properties, as Dr. Bander has deposed in Examination-in-chief. It is not clear from the judgment of the Supreme Court of Canada whether it has proceeded on a basis different from the ratio of the decision of the Exchequer Court of Canada, as Mr. Blanco White has submitted in the course of his argument. In any event, I do not agree with the decision of the Exchequer Court in so far as it has proceeded purely on a numerical basis and has rested its judgment merely on the fact that there would be a large number of possible compounds that could be produced by the patented process which had not been tested. In my opinion, when a process patent is obtained after prolonged and thorough research work, it may be possible to predict that the substances produced by that process would have a particular property though it is usually impossible for anybody to test all the possible substances that could be produced by that process. As stated in Terrel on the Law of Patents (11th ed.) p. 128 para 315, it is wrong to suppose that "there is no provision in chemistry." I accept the evidence of Dr. Bander that when several pharmacological compounds having the same

characteristic structure exhibit the same pharmacological behavior, it can be predicted that other such compounds would have the same behavior, provided the necessary limitations in regard to radicals are observed, particularly when compounds without those limitations have also been tested and found not to have the property in question. I am afraid I am unable to agree with the decision of the Exchequer Court of Canada in the above case that merely because a process patent may embrace a very large number of compounds all of which, or even a substantial number of which, cannot be individually tested, the patent must be held to be invalid. To take that view would, in my opinion, invalidate a large number of process patents. I, therefore, decline to follow the decision of the Exchequer Court of Canada in the above case. If the Supreme Court of Canada intended to lay down a different test viz the tests as to whether the new substances produced by that process can, after proper research, be predicted as possessing "unexpected utility" in the form of hypoglycemic effect, I agree with that view. That test is satisfied in the present case, as held by me above.

19. I am informed that the Patent office in this country follows the same practice as is prevalent in Canada which is based on Section 41 (1) of the Canadian Patent Act mentioned above, which in its turn was based on a section in the old Patent Act in England that, as far as chemical substances intended for food or medicine are concerned, patents cannot be granted for the substance itself, except when prepared by the processes claimed or their obvious chemical equivalents. It has been stated to me that this practice of the Indian Office is based on the English practice. I am afraid, however, the Indian Patent Office has overlooked the fact that the section on which the English practice was based has since been repealed in England (vide Terrell on the Law of Patents (11th edn.) p. 20 para 53) and does not find place in the new English Act of 1949 and there is no such practice now prevalent in England, and that there is no section corresponding to the old English section or to Section 41 (1) of the Canadian Patent Act in the Indian Patents and Designs Act. There is, therefore, no warrant for chemical patents being treated in this country in a way different from other patents, in regard to which the patent office in this country does grant patents for substances per se. In the absence of express statutory provisions, as stated in Terrell on the Law of Patents (11th Ed.) pp. 127-128 para 315, the belief that the law applicable to chemical cases is peculiar is erroneous, and the principles applicable in the case of patents for chemical processes are "precisely similar" to those applicable in the case of other patents. The validity of a claim corresponding to claim No. 1 in the present case was also challenged in an infringement action brought by the present plaintiffs in Ireland where the validity of that claim was upheld by the Irish court in a judgment delivered on 28th November 1967. It may be stated that the plaintiffs have registered a substance patent for Tolbutamide in England, but their patent in Ireland is a process patent only in view of the statutory provisions in force there. In upholding the plaintiffs' patent it was stated by Kenny J. in his judgment in the said Irish case, "In my opinion, the writer of the claims in a process patent is entitled to include claims for processes which he is certain will work because of the results of other processes." I am in full agreement with that view of Kenny J. The question which arose for decision in the Canadian case and is raised by Mr. Mistree in the present case, however, did not arise before the

Court in Ireland and it is, therefore, not necessary for me to deal any further with the same. It may be mentioned that the Canadian case discussed above, though earlier in point of time has not been considered in the judgment in the Irish case.

20. As stated by Halsbury (3rd Edn.) Vol. 29 p. 59 Para. 123, "not useful" in patent law means that the invention will not work, either in the sense that it will not operate at all or more broadly, that it will not do what the specification promises that it will do. If the invention will give the result promised at all, the objection on the ground of want of utility must fail. It is further stated in the said passage that the practical usefulness or commercial utility of the invention does not matter, nor does it matter whether the invention is of any real benefit to the public, or particularly suitable for the purposes suggested, and that it is only failure to produce the results promised that will invalidate the patent, not misstatements as to the purposes to which such results might be applied. In Terrell on the Law of Patents, (11th Edn.) p. 98 para 248, quoting from an English case, it is stated that if the patentee claims protection for a process for producing a result and that result cannot be produced by the process, the consideration fails. It is further stated there that objections to patents on such grounds are sometimes treated as objections for want of utility, and when so treated, the well known rule is that the utility of an invention depends upon whether, by following the directions of the patentee, the result which the patentee professed to produce can in fact be produced. Quoting from another English case, the same proposition is stated in another way in Terrell at p. 99, viz. that the protection is purchased by the promise of results, and that it does not, and ought not, to survive "the proved failure" of the promise to produce the results. As already stated above, the only result which the specification (Ex. A) in the present case professed to produce was a new class of chemical compounds having hitherto unsuspected blood sugar lowering property, but without the undesirable side effects of the previously known sulphonamides. As also stated above, the defendants have not been able to prove that a single compound falling within the patent does not possess blood sugar lowering properties to a greater or lesser degree. The position, therefore, is that not only is there no "proved failure" to produce the results promised by the plaintiffs' patent specification (Ex. A), but there is a "proved failure" on the part of the defendants to show that compounds falling within the patent do not have the blood sugar lowering properties promised by that patent. I, therefore, hold that the objection on the ground of want of utility must fail, and with it also the objection that the methods of manufacture are old and known methods and, therefore, there is no inventive step as far as the plaintiffs' patent No. 58716 is concerned. In the result, all the grounds on which the validity of the plaintiffs' patent was challenged stand rejected, and issue No. 3 must be answered in favor of the plaintiffs.

21. In view of the conclusion at which I have arrived, the plaintiffs will be entitled to the normal reliefs available in an infringement action, viz., an injunction, as well as an order for the delivering up for destruction of all articles in the defendants' possession made in infringement of the plaintiffs' patent No. 58716. The plaintiffs have, however, not led any evidence before me to prove damages, nor has any argument been addressed to me in regard to the claim for damages

or the alternative claim for an account of the profits contained in prayer (c) of the plaint which must, therefore, be treated as not pressed by the plaintiffs. I answer the issues as follows :-

1. In the affirmative.
2. In the affirmative.
3. Plaintiffs' patent No. 58716 is not invalid and is not liable to be revoked on any of those grounds.
4. In the negative.
5. In the negative.
6. The plaintiffs are entitled to relief by way of injunction, but the reliefs sought in prayer (c) of the plaint have not been pressed.
7. See Order below.

ORDER:- I grant an injunction in terms of prayer (a) and pass an Order in terms of prayer (d). I also order that the defendants do pay the plaintiffs' costs of the suit.

Under Section 32 of the Indian Patents and Designs Act, I certify that the validity of the patent came in question in this suit. Mr. Laud states that his clients will not enforce the orders passed by me for a period of two weeks from to-day in order to enable the defendants to consider my judgment. In accordance with Section 33 of the said Act, I direct that a copy of this judgment be sent to the Controller of Patents and Designs.

Injunction granted.