COMMISSIONER'S DECISION

SECTION 36: Claims for Insecticides with Carriers.

An applicant who has invented and claims a new insecticide may not claim the insecticide mixed with a carrier. (Cf. C.D. 296)

Rejection: Affirmed. This decision is the subject of an Appeal pending in the Federal Court of Canada.

Patent Application 132,421, Dawes et al, (Class 260/313.3) was filed on January 14, 1972, by Agripat S.S., a Swiss company connected with Ciba-Geigy. Certain claims were rejected by the examiner under Rule 46 on December 10, 1974, followed by a request for review. As part of that procedure, a hearing before the Patent Appeal Board took place on January 27, 1976, at which the applicant was represented by Mr. Russell Smart, Q.C., and Mr. R. Fuller. The issue to be resolved was whether the applicant having invented a new chemical compound useful as an insecticide, and which he has claimed as the invention, is also entitled to make claims for that compound mixed with extenders, surfactants, and propellants.

The invention disclosed in the application is a triazolylphosphoric acid ester, which possesses insecticidal properties. In claims 1 - 4 (which were not rejected) Agripat covers the compound, a process for preparing it, and a method of using it. In plaims 5 - 11 (which were refused) they claimed the compound in admixture with solid extenders, surfactants, or acrosol propellants, and granules or pellets coated or impregnated with the compound. A final claim 12, which was for the compound in a convainer together with instructions for using it, was also rejected, but the applicant has since withdrawn it and it need not be considered. Subsequent to the rejection the applicant proposed certain emendments, which were not accepted. Since the claims on file differ in no material respects from the proposed claims (this view was accepted by Mr. Smart at the hearing), we will limit our consideration to the claims which are on file and which were rejected, viz. 5 - 11. They are as follows:

- 5. A pesticidal composition which comprises (i) the compound according to claim 1, in intimate admixture with at least one of the following: (ii) a solid extender; (iii) a surfactant; or (iv) an acrosol propellant.
- A solid composition according to claim 5 which comprises one or both of (ii) and (iii).
- 7. A composition according to claim 6 in the form of a granulate or pellets.
- 8. A composition according to claim 7 wherein the granules or pellets are coated or impregnated with (i).
- 9. A liquid composition according to claim 5 which comprises one or both of (iii) or (iv).
- 10. A composition according to claim 9 comprising (iii) and a hydrocarbon which boils at a temperature above 130°C.
- 11. / composition according to claim 9 comprising, as (iv) a polyhalogenated hydrocarbon.

The examiner refused these claims on the grounds that they did not properly define the invention, relying on the findings in <u>Gilbert v. Sandoz</u> (1971) 64 C.P.R. 14, and 1974 S.C.R. 1336 (where it is styled as <u>Gilbert v Gilcross</u>). In that decision it was stated that claims to a pharmaceutical compound associated with a carrier:

... cannot stand in respect of any inventive step involved in the mixture of a substance with a carrier, since there is no invention involved in such step. (quoted from the decision of the Exchequer Court at p. 35, and adopted by the Supreme Court at p. 1339.)

It was the examiner's view that when the invention is a new chemical compound which is claimed as the invention, claims to the compound associated with carriers and diluents are not patentable, since the inventive concept resides in the compound itself. He stated that:

which are already claimed, there being no further invention in the mixture of the compounds with a solid extender and/or a surfactant and/or an acrosol propellant. The addition of these carriers and/or additives is merely to obtain a suitable method for application. There is no interaction between the compound (s) of the invention and these carriers and/or additives and certainly no new and unexpected result in itself is obtained. Claims 5 to 11 are accordingly rejected.

It is the applicant's position that all the claims should be permitted as they relate to different aspects of the same invention, and that the rejected claims cover a commercial embodiment of the invention. He argued that there is no undue multiplicity of claims such as would contravene Rule 43, and that being so the findings in such jurisprudence as <u>Baldwin International</u> v Western Electric 1934 S.C.R. 94 and <u>Hercules v Diamond-Shamrock</u> 1970 Ex. C.R. 574 confirm his contention that he is entitled to such claims. Claims 5 - 11, he says, are for the invention in the form that it is most likely to be sold to the public, and therefore are the preferred embodiment of the same invention as appears in claims 1 - 4.

At the hearing, Mr. Smart developed the argument that claims 5 - 11 are needed in the event that it should be discovered after grant that the compound of claim 1 is old, - perhaps disclosed as a chemical curiosity in some obscure publication, without any reference to its insecticidal properties. In that event, he contends, claim 5 would afford protection for the applicant's discovery. To quote from his response of Sept. 25, 1974, p. 4:

An applicant can never be sure that his compounds are novel or unobvious. Thus he can never be 100% certain that there is no remote publication, possibly in an obscure foreign language, disclosing one or more of the compounds embraced by his product claims. Such a publication could for example merely disclose one of his products as a chemical curiosity, with no suggestion of the suitability of the product for the purpose now claimed.

Hence before applying for a patent for an invention applicants try to ensure by thorough searches that the subject matter for which patent protection is sought is new but there always remains an uncertainty. This is due to the enormous growth of technical knowledge during past decades which reflects itself in numerous periodicals and monographics. Applicants believe that everybody who deals with research in scientific and especially in chemical literature is aware of the difficulties involved in comprehending and searching all existing and ever expanding publications. Great difficulties arise in this connection from the fact that chemical abstracts services in general tend to report only compounds which are identified by their structures and their physical properties. A mere list of names of chemical compounds is not sufficient for a report by "Chemical Abstracts" for example. However on the other hand compounds from such a list would form a bar against the novelty of a chemical invention. Thus from a technical point of view it is impossible for anybody to search chemical literature in such a way that he can be 100% confident that he has taken into consideration all available information existing anywhere. (underlining added)

The applicant differentiates his position from what occurred in <u>Gilbert v</u>
Sandoz (supra) in several ways. He says (response of Sept. 25, 1974, p.3):

As the Sandoz decision relates to medicines, which along with foods are given special treatment in the Patent Act, any extention to other types of invention should be approached with extreme caution. Furthermore it should be quite clear that the <u>Sandoz</u> vs <u>Gilcross</u> decision cannot be given a meaning which makes nonsense of various sections of the Patent Act. Thus it follows that to cite the decision as an authority for rejecting one claim in an application because it is not inventive over another is clearly wrong as such an interpretation conflicts with the provisions of Sections 36 and 38 of the Patent Act.

He has stated that the Gilbert decison derives from findings in Rohm & Haas v Commissioner of Patents 30 C.P.R. 113; 1959 Ex. C.R. 133 and Commissioner of Patents v Farbwerke Hocchst 1964 S.C.R. 49; 41 CPR, which he says stand for the proposition that an applicant cannot get a second patent for composition claims, but is not precluded from claiming them in an original application together with claims to the compound. He has further submitted that:

In <u>Sandoz v. Gilcross</u> the two claims at bar were in process dependent form, <u>prima facie</u> satisfying Section 41(1); hence if the earlier process claims had fallen, these claims had to fall too, as Section 41(1) could not then be satisfied (see, <u>interalia C.H. Bochringer Sohn v. Bell Craig</u>, 25 Fox P.C. 36, <u>Sup. Ct.</u>)

We think it would also be useful to refer to two other arguments of the applicant, viz:

The claims give in a few words a summary of the heart of the invention. If as in the present case the compound per se, the compositions and the method of use claims are merely three aspects of the same invention the presence of this latter type claims will obviously help the public to clearly see which use is especially protected. It will also facilitate documentation as well as research if it is clearly apparent that not only the compound but also the compositions and its method of use are protected.

and

Before leaving the subject of the composition claims completely, applicants would like to observe that it also appears to be illogical to permit an applicant to claim a composition where the active ingredient is old but deny the same right to an applicant where the active ingredient is novel.

We accept the proposition that an applicant is entitled to claims of varying scope to define the invention. The <u>Hercules v Diamond Shamrock</u> (supra) and <u>Baldwin International v Western Electric</u> (1934 S.C.R. 94) decisions stand

for that proposition. This is so that if it should be found that the inventor has claimed the invention too broadly, his narrow claims will remain to provide protection for the narrower scope of the same invention to which he is properly entitled. That is not, however, the same as saying he is or titled to claims for subject matter which can later be put forward as covering a different invention should the main claims fall. Claims must define the invention itself, and not go beyond it. Section 36(2) of the Patent Act is statutory authority for that statement. It requires that the inventor distinctly claim the part which is the invention. What we must decide is how far an applicant may go in achieving the goal of protecting his invention fully without overstepping the limits of the invention by claiming what is not rightfully his. For to paraphrase what was said by the Supreme Court in B.V.D. v Can. Celanese (1937) S.C.R. 221 at 237, if the claims in fact go beyond the invention, the patent is invalid. In the B.V.D. case (which was confirmed by the Privy Council (56 R.P.C. 122), the court was of course considering claims which encompassed anticipatory matter, and caution must be exercised in adopting the broad reasoning adopted under those circumstances to another situation.

In <u>Bergeon v. DeKermor Electric</u>, 1927 Ex. C.R. 181, at 187, Mr. Justice Audette came close to this matter when he said:

A man cannot introduce some variations or improvements, whether patentable or not, into a known apparatus or machine and then claim as his invention the whole apparatus.

He also quoted with approval the following passage from Nicholas on Patent Law:

When the invention is for an improvement (as in this case) the patentee must be careful to claim only the improvement and to state clearly and distinctly of what the improvement consists. He cannot take a well known existing machine, and, having made some small improvements, place that before the public and say: "I have made a better machine. There is the sewing machine of so and so; I have improved upon that; that is mine, it is a much better machine than his." He must distinctly state what is, and lay claim only to his improvement. (underlining added)

When we turn to the case before us, we find that mixtures of insecticides with carriers are well known. The applicant has replaced the old insecticides with a different one, one patentable in its own right. An argument might well be advanced—that his claim should be limited to that "improvement" over

the prior art.

We have also had reference to Dick v. Ellam's Duplicator Company (1900) 17 R.P.C. 196 at 202, where we find:

.... I do think there is something in the invention, and that the invention might have been patentable if the Patentee had not thrown his net too wide as Patentees constantly do, to catch people who do not infringe the real invention.

In American patent law this type of objection has been referred to as one based on old or exhausted combinations. Reference may be made to paragraph 706.03(j) of the U.S. Manual of Patent Examining Procedure, and there is a considerable body of American patent law holding that when an applicant has improved one element of a combination which may be <u>per se</u> patentable, he is not entitled to claim the improvement in combination with old elements when the elements perform no new function in the claimed combination.

The Canadian Courts have been confronted with a similar issue to that now before us in at least three instances where applicants wished to claim substances mixed with carriers. In Rohm & Haas v. Commissioner of Patents 1959 Ex. C.R. 133, the invention was for fungicidal compositions. Not all the composition claims had been refused, and the principle ground for rejecting those that were rejected was Section 35(2), now 36(?), of the Patent Act. However, Mr. Justice Cameron added the following comment (p. 163):

I am of the opinion however, that where a claim to a compound has been allowed, a claim to a fungicidal composition merely having that compound as an active ingredient is not patentable.

In Rohm 6 Haas the claims to the compound had already been granted in another patent for a divisional application, though the extract just quoted makes no distinction of that nature, and indicates no limitation to such situations.

In <u>Commissioner of Patents v. Farbwerke Hoechst</u>, 1964.S.C.R. 49 the Commissioner rejected certain claims to a medicinal compound mixed with a carrier. The applicant had filed nine other applications for the medicine when made by nine different processes. In reversing the Exchequer Court, the Supreme Court made the following comments at p. 53:

The fallacy in the reasoning (of the lower court) is in the finding of novelty and inventive ingenuity in this procedure of dilution. It is an unwarrantable extension of the ratio in the <u>Commissioner of Patents v. Ciba</u>, where inventive ingenuity was found in the discovery of the valuable properties of the drug itself.

A person is entitled to a patent for a new, useful and inventive medicinal substance but to dilute that new substance once its medical uses are established does not result in further invention. The diluted and undiluted substance are but two aspects of exactly the same invention. In this case, the addition of an inert carrier which is a common expedient to increase bulk, and so facilitate measurement and administration, is nothing more than dilution and does not result in a further invention over and above that of the medicinal itself. If a patent subsists for the new medicinal substance, a separate patent cannot subsist for that substance merely diluted.

These two decisions do make it reasonably clear that a second patent may not ordinarily be granted to a substance mixed with a carrier when the patentee has already been granted another patent for the substance alone (unless, perhaps, some additional invention results from mixing it with the carrier),

Less certain is whether the same objection arises if the two sets of claims are in the same patent or application. The broad statements in the decisions suggest it does, but the circumstances surrounding the cases, and the inclusion of references to "separate patents" elsewhere in the texts, leave some doubt on this point.

That it was meant to have broader application and apply to claims in the same patent might be taken from <u>Gilbert v. Sandoz</u> (1971) (supra). Here the patent included claims for a pharmaceutical compound and claims for that compound "associated with a pharmaceutically acceptable, nontoxic carrier". In discussing the latter claims the Exchequer Court held them invalid (at p.35) for the following reason:

...since no invention of pharmaceutical composition was made, as distinct from the invention of thioridazine itself which is fully claimed in claims 1 to 9, there is no basis for the presence in the patent of claims 10 and 11.

These last mentioned claims, as I see it, cannot stand as claims in respect of any inventive step involved in the mixing of a substance with a carrier since there is no invention in such a step. (Vide Commissioner of Patents v. Farbwerke Boechst, 41 C.P.R. 9, 1964 S.C.R. 49).

In affirming, the Supreme Court (at p. 1339) quoted the preceding paragraph and added:

I agree with the conclusion of the learned trial judge and this makes it unnecessary to consider the further reasons he advanced.

From the comments of the Canadian Courts it is reasonable to conclude that their objection to the carrier claims is founded upon the view that they go beyond the invention, and that they do not distinctly claim the invention. In other words, that they cover an exhausted combination.

We should, however, explore the issue further. We have already referred to the Hercules Inc. v Diamond Shamrock case above. In it the President of the Exchequer Court considered the role of claims in patents beginning at p. 584. He pointed to the statutory right expressed in Section 36(2) of applicants to make claims (in the plural) for different aspects of the invention, and more particularly to his right to claim both a process and a substance in the same patent. He referred to Section 41 as verifying this conclusion (Section 60 might also have been mentioned). Later, at page 598, when describing what occurs in claiming Mr. Jackett said:

.... in the first instance, a claim is made in the widest terms possible for the subject matter described in the specification, and then, by what seems to be an infinite variety of changes in the terms of the first claim, the inventor makes additional claims by which the invention is variously described by adding additional limiting factors not included in the initial claim. If the first claim is not attacked, no resort need be made to the other claims. If, on the other hand, a Court finds the first claim invalid because, for example, it does not show the application of inventive ingenuity, an attempt can be made, nevertheless, to support one or more of the other claims on the ground that the additional factors tacked on in them have resulted in a description of a real invention.

From the reasons for judgement in <u>Societé Rhone-Poulene v Jules Gilbert</u> 1966

Ex. C.R. 59 at 62-3 and 1967 S.C.R. 150, in <u>Libby-Owens-Ford Glass v Ford Motor</u>

Co. 1970 S.C.R. 833 at 841, and in <u>Auer Incandescent Light v O'Brien</u> (1897)

5 Ex. C.R. 243 at 286-288 it is also clear that patentees are entitled to a variety of claims for their invention. For example, process claims and claims to substances, or process and apparatus claims may define different aspects of the same invention. To quote from the <u>Libby-Owens-Ford</u> decision, <u>supra</u>, at p. 841:

The established practice of the Patent Office of allowing both apparatus and process claims or process and substance claims in a single patent indicates that process claims are apt to be considered, in a proper case, as being different aspects of a single invention covering either an apparatus or a substance. (underlining added).

The issue, then, is not whether the applicant is entitled to a variety of claims (he is), nor that the rejected claims are narrower than the allowed claims (they are). The issue is how far the applicant may go in claiming his invention, and whether the refused claims properly define the invention.

We do not perceive the same dangers in a "chemical curiosity" endangering the applicant's rights as he does. The requirements a prior disclosure must satisfy before it can be said to anticipate an invention are strict, and if no utility had been shown for a chemical compound referred to in an "obscure" reference, we question if it would invalidate subsequent claims to that compound. In Scragg v Leesona 1964 Ex. C.R. 649 at 725, for example, we find:

It is established that a prior publication must not be held to be anticipatory of an invention in issue in an action for infringement or impeachment of a patent unless the conditions specified in the leading cases are clearly shown to be present in it. The basic tests may be stated briefly. The information as to the invention in issue given by the prior publication must, for the purposes of practical utility, be equal to that given by the patent for the invention and show everything that is essential to it so that a workman of ordinary skill in the relevant art would at once have perceived, understood and been able practically to apply the invention without the necessity of further experiment. It is not enough to prove that the information could have been used to produce the result of the invention in issue; there must have been a clear and unmistakable direction to use it for such purpose. Nor is it sufficient that the prior publication contained suggestions which, taken with other suggestions, might be shown to have fore-hadowed the invention in

issue or important steps in it, or that it contained the nucleus of the idea of the invention which could have been regarded as the beginning of its development. If the prior publication is to be regarded as a prior publication of the invention in issue it must be shown that it published to the world the whole invention with all the material necessary to instruct the public how to put it in practice and that it so disclosed the invention to the public that no person could subsequently claim it as his own. Put in different terms, there is the test stated by Viscount Dunedin, in delivering the judgment of the Judicial Committee of the Privy Council in Pope Appliance Corporation v. Spanish River Pulp and Paper Mills Ltd. that a prior publication is not to be regarded as an anticipation of the invention in issue unless it can be shown that a person grappling with the problem solved by the patent and having no knowledge of it but having the prior publication in his hand would have said "That gives me what I wish". Nor can anticipation of the invention in issue be proved by resort to alleged inventions that were not put into practice or were inoperable.

Similarly, in Lovell v. Beatty (1966) 23 F.P.C. 112 at 137 to 140 Mr. Justice Thorson, after referring to numerous Canadian and British decisions as authority, confirmed the principle that before a prior publication can anticipate, it must publish the "whole invention - i.e. all that is material to instruct the public how to put the invention in practice." Or as it was expressed in Gerrard Wire v Cary 1926 Ex. C.R. 170 at 178, utility is a requisite of invention, and one inventor cannot predate another without that element being present.

The applicant has pointed to <u>Burton-Parsons v. Hewlett Packard</u> (1975)

17 C.P.R. (2d) 97, as a recent decision where the Supreme Court of Canada held valid composition claims where all the parts of the claim were old. In that case, however, there was no invention in the separate parts, only on the combination of those parts co-reacting to produce the desired result.

Having considered all the applicant's arguments, we are satisfied that claims 5-11 are not allowable, and should be refused.

Gordon Asher, Chairman,

Patent Appeal Board.

I concur with the findings of the Patent Appeal Board, and refuse claims 5-11 inclusive. The applicant has six months within which to delete the latter claims, or to appeal this decision under the provisions of Section 44 of the Patent Act.

J.H.A. Garicpy, Commissioner of Patents.

Dated at Hull, Quebec

this 25th day of June, 1976