

COMMISSIONER'S DECISION

Compound + Carrier - Ethanesulphic Acids

Applicants claims to compounds mixed with carriers were refused under Section 36. Claims to the compounds themselves had been deleted previously.

Final Action: Affirmed Sept. 14, 1979

Patent application 144,471 (Class 260-464.4), was filed on June 12, 1972, for an invention entitled Beta-Substituted Ethanesulphinic Acids And Oxygen Or Sulphur Esters Thereof As Plant Growth Regulators. The inventors are Kurt H.G. Pilgram et al, assignors to Shell Oil Company. The Examiner in charge of the application took a Final Action on June 18, 1975 refusing to allow it to proceed to patent. In reviewing the rejection, the Patent Appeal Board held a Hearing on May 9, 1979, and at which the Applicant was represented by Mr. R. Wilkes.

The invention in question involves certain chemical compounds which are sulphinic acids, esters of said acids, and amides derived from them. Their exact chemical structure is not material to the issues which arise. The compounds are useful as plant growth regulants, for inducing early fruit ripening, for stimulating seed germination, and the like.

At the time of the rejection some claims were directed to chemical compounds which are new (claim 12-19), some to compositions consisting of the chemical compounds and other similar compounds mixed with an adjuvant therefor (claims 1-11), and one claim to a method of using the compositions. The Examiner refused claims 1 to 11, relying upon what was said by the Court in Gilbert v Sandoz 64 CPR 147 reporting the decision in the Federal Court, and 8 CPR (2d) 210 (where the holding of the Supreme Court of Canada is reported). The reason for the rejection was that the claims to the

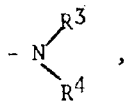
compounds represent the full extent of the protection to which the applicant is entitled.

Disposition of this application was deferred until the conclusion of the appeal in Agripat v Commissioner of Patents, decided by the Federal Court of Canada on Dec. 14, 1977, which dealt with a similar question.

After the Final Rejection the applicant indicated he would like to cancel all the compound claims (12-19), and maintains that with such cancellation he would be entitled to the composition claims 1-11, on the basis that while he may not be entitled to both sets of claims, he is entitled to claim either set by itself.

The issue is complicated by the fact that the compounds in the composition claims are somewhat broader than those covered by the compound claims. Mr. Wilkes said at the Hearing that the compounds included in the composition claim are partly old and partly new, while those in the compound claims are, it seems, entirely new. That position appears to be substantiated, at least indirectly, by the statement at the bottom of page 10 of the disclosure, which reads:

Many of the active compounds mentioned herebefore, in particular all the compounds having the above formula I wherein A is the group

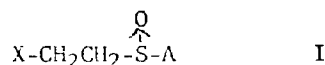


have not previously been known in the art. Accordingly the invention also provides novel compounds defined by the formula....

Claim 1, which is reproduced below, will serve to illustrate both the nature and wide scope of the rejected subject matter. The last line of the claim (which has been underlined) is the principle point of difference between the composition claims and the compound claims (other than the difference in scope already mentioned). Many of the compounds listed in the claim are new, and have

been previously claimed by the applicant as new compounds not only in this application but also in his foreign priority applications. See, for example, U.S. Patent 3850838, Aug. 20, 1974, Cl. 260/551, Pilgram et al assigned to Shell Oil, U.S. 3876678 Apr. 8, 1975 Cl.260/456, and U.S. 3927062 Dec. 16, 1975 Cl.260/456. There is no doubt, consequently, but that the rejected subject matter covers many new chemical compounds mixed with an adjuvant.

Claim 1- A plant growth regulant composition comprising a compound of the formula



wherein X represents chlorine, bromine, iodine, hydroxy, alkoxy of up to 3 carbon atoms, aryloxy of up to 10 carbon atoms, alkylthio of up to 3 carbon atoms, aralkoxy of up to 10 carbon atoms, acyloxy of up to 4 carbon atoms, alkylsulphonyloxy wherein the alkyl group contains up to 3 carbon atoms, arylsulphonyloxy, nitro, monoalkylamino or dialkylamino wherein each alkyl group contains up to 6 carbon atoms, or A'R' wherein A' is oxygen and R' is 2-(dimethylcarbamoyl)-1-methylvinyl, 2-(methylcarbamoyl)-1-methylvinyl or 2-(methoxycarbonyl)-1-methylvinyl; and either A represents the group -Y-R wherein Y is oxygen or sulphur with the proviso that when Y is oxygen R is alkyl of up to 20 carbon atoms, aryl of up to 10 carbon atoms, aralkyl of up to 10 carbon atoms, alkenyl of up to 8 carbon atoms, alkynyl of up to 4 carbon atoms, 2-(dimethylcarbamoyl)-1-methylvinyl, 2-methylcarbamoyl)-1-methylvinyl, 2-(methoxycarbonyl)-1-methylvinyl or ZR² wherein Z is alkylene of up to 4 carbon atoms and R² is alkylthio of up to 3 carbon atoms, alkoxy of up to 4 carbon atoms, aralkoxy of up to 10 carbon atoms, hydroxy, or a beta substituted ethane-sulphonyloxy moiety wherein the beta substituent is identical to the beta substituent represented by X in formula I above; and when Y is sulphur R is alkyl of up to 8 carbon atoms optionally substituted with chlorine or bromine, or aralkyl wherein the alkyl group contains up to 4 carbon atoms; and R may also represent hydrogen, if Y is oxygen and X is any of the moieties represented by X above except A'R';

or A represents the group $-\text{N} \begin{smallmatrix} \text{R}^3 \\ \text{R}^4 \end{smallmatrix}$ wherein R³ and R⁴ may be the same or different and each represents hydrogen, alkyl of up to 20 carbon atoms or aralkyl of up to 10 carbon atoms; either or both of R³ and R⁴ may be R⁵Y' wherein R⁵ is alkylene of up to 4 carbon atoms and Y' is hydroxy or betahaloethanesulphonyloxy wherein the beta halogen substituent is chlorine, bromine or iodine with the proviso that when Y' is hydroxy X represents any of the moieties described for X above except A'R' and when Y' is a betahaloethanesulphonyloxy X is chlorine, bromine or iodine, if R³ is hydrogen R⁴ may also represent aryl of up to 10 carbon atoms, alkenyl of up to 8 carbon atoms, cycloalkyl of up to 8 carbon atoms, R⁵Y² wherein R⁵ is as described above and Y² is alkylthio

of up to 3 carbon atoms, alkoxy of up to 4 carbon atoms, when R⁵ is hydrogen R⁴ may also represent a substituted phenyl of the formula



wherein Z' is alkyl of up to 3 carbon atoms,

alkylthio of up to 3 carbon atoms, alkoxy of up to 3 carbon atoms, alkylsulphonyl of up to 3 carbon atoms, chlorine, bromine, nitro or trifluoromethyl; and if R⁵ is hydrogen, alkyl or aryl R⁴ may also represent hydroxy or alkoxy of up to 4 carbon atoms,

together with an adjuvant therefor.

The "adjuvants" have been defined at the bottom of page 18 of the disclosure, are added to the compounds by "conventional techniques", and comprise "modifiers which are known in the agricultural chemical art to provide compositions in the form of wettable powders, dusts, granules, pellets, solutions, emulsifiable concentrates, emulsions and pastes." From this it is evident that there is nothing unusual or unexpected in what adjuvants are used, their effect in the compositions, or how they are mixed with the active chemicals.

In his report of Oct. 29, 1974, the Examiner said:

Claims are refused when the inventive matter is claimed in association with other substances and it is clear that there is no invention in the aggregation so resulting apart from the inventive matter itself. The applicant may not claim a chemical compound mixed with a carrier where the invention is the compound itself. (Gilbert v. Sandoz 64 C.P.R. 14, S.C. Oct. 18, 1972). For example an applicant who invents a new chemical compound X, which he discloses as a useful insecticide, may claim X but may not claim admixtures thereof with regular insecticidal carriers. Conceivably, if he had made a further invention by admixing it with a special carrier that unexpectedly increased the effectiveness of compound X significantly, he could claim that admixture in a divisional application as directed to a separate invention.

In response the Applicant argued that the effect of Gilbert v Sandoz (supra) was limited to foods or medicine coming within the scope of Section 41(1) of the Patent Act, but the Agripat v Commissioner of Patents decision (supra), where the compositions were insecticides, has demonstrated the error of that contention.

In his letter of October 4, 1978, Applicant has taken the following position

In deciding this question, it seems to both Applicants and their agents that two points, of law and the other of fact, are of decisive importance. The Examiner, in both of his Actions, referenced the salient portion of Gilbert v. Sandoz. That decision, as later followed by the Federal Court, Appeal Division, in Agripat vs. The Commissioner, makes it clear that where new compounds are claimed, then no invention can lie in compositions involving those compounds. Therefore, the compositions cannot be claimed. Even allowing that resolution of this specious logic must await further comment by the Supreme Court, it is nevertheless abundantly clear that neither the Supreme Court in both Farbwerke Hoechst v. The Commissioner and Gilbert v. Sandoz, nor the Federal Court, Appeal Division in Agripat v. The Commissioner were considering a situation in which allegedly new compounds were NOT being claimed (not even in the form required by Section 41(1), which does not apply to this application). Thus there is not, and cannot be, any consideration by the Courts in any of these cases as to whether compositions can be claimed in the absence of claims to allegedly new compounds involved in those compositions. In this context it is also pertinent to note the old dictum that what is not claimed is also expressly disclaimed. Thus it is Applicant's view that none of these cases state that where allegedly new compounds are involved, then only those allegedly new compounds may be claimed. Further, the Examiner has not expressed such a view: his only objection has been that if allegedly new compounds are claimed, then compositions cannot be claimed as well. The Examiner has not said that if the claims to the allegedly new compounds are deleted, then the compositions still cannot be claimed.

Indeed if the Examiner is now proposing to adopt such a view, then Applicants point out that they are entitled to an Office Action, which is not a Final Action, both making that objection and indicating the Examiner's grounds for raising such a new objection. Further there can be no question that a composition claim is an inherently unallowable form of claim: such claims were deemed valid by the Supreme Court in, for example, Burton-Parsons vs. Hewlett-Packard (17 C.P.R. 2d 97).

It is also well settled law that, subject to the constraints of Section 2 of the Act, it is open to an Applicant to claim such of his invention as he so desires to protect: he does not have to claim all of it, nor does the Commissioner (or an Examiner) have any legal basis to insist that any particular part of it be claimed if an Applicant decides not to do so. It is an Applicant's prerogative to decide just how much of what has been invented he shall take steps to protect. Thus the Supreme Court in Baldwin v. Western Electric (1934 S.C.R. 94 at 105) stated "It is only if the Applicant desires to claim invention for a subordinate element per se that it is necessary for him to claim the element separately, if he wishes to secure in it an exclusive property and privilege". Clearly such a flexibility of claiming must extend to the embodiment of Applicant's invention which he will take into the commercial market place - in this case, that is the compositions. Indeed this protection of commercially useful inventions in terms of their marketable embodiments is precisely what patents always have been all about. For example, the Act from which our present Act derives (The Statute of Monopolies, (21 Jac. I, c.3, 1623) contains the provision that patents are directed to "any manner of new manufactures". Thus an Applicant must, in law, have the basic right to claim the commercial embodiments of his invention.

At the Hearing Mr. Wilke said that this application was being treated differently than some other applications, and in particular those which issued to two particular patents to which he referred. What was done with certain other applications is, however, hardly any criterion as to what should have been done either with them or this application. Conceivably some oversight might have been involved in their acceptance. The single reports on each of them dealt only with informalities and nothing substantive was raised in them. Neither of the applications came before the Board & Commissioner, nor did we have the occasion to review their prosecution before grant. Further we question whether it is proper for us to comment now upon their validity, and for that reason we have not identified them here. In any event it should be noted that both of the patents were allowed before the Agripat decision mentioned above, and further that in one of them all the compounds in the composition were old, and are so described in the first paragraph of the disclosure. Consequently it is not in any way analogous to the present application.

One of Mr. Wilke's arguments was that composition claims as such are inherently patentable (he cited Burton-Parsons v Hewlett Packard, 17 C.P.R. 2d 97 to show that composition claims have in some instances been found valid). We of course agree, subject of course to the proviso that in any particular case there may be perfectly proper reasons why composition claims should be refused, or would be invalid if allowed. The question is not whether composition claims may be accepted, but when they may be accepted.

He also contends that Section 36(2), as interpreted by Baldwin v Western Electric (1934 SCR 94) gives the applicant the right to decide what he wants to claim, and he says "applicant" is the word used in the section, not "examiner." Again we agree, but subject again to a proviso. The applicant may decide which of any allowable claims he wishes to make. He cannot, however, decide to make unallowable claims, and the Examiner is fully justified in objecting to unallowable claims.

The applicant's position is that Gilbert-Sandoz stands for the proposition that he may claim either the compounds or the compositions, but not both. What we must ascertain is whether that is so.

If we turn to the decision of the Exchequer Court in Gilbert v. Sandoz, supra, at p. 35, we read:

I find, therefore, that the discovery of the usefulness of thioridazine and of the usefulness of the chemical procedure for producing it represents a patentable invention. On the other hand I am also of the opinion that pharmaceutical compositions consisting of a therapeutically acceptable amount of thioridazine associated with a carrier represent no invention whatsoever save in so far as thioridazine itself is an invention.

With respect to the objection that there was no invention the effect of these findings, as I see it, is first, that, no consequences flow from the finding that there was no invention of the class of phenothiazines since the patent contains no claim and purports to give no monopoly of any such class; second, that no consequence adverse to the patentee flows from the finding that there was a patentable invention of thioridazine since in this respect the objection is not sustained and, third, that since no invention of pharmaceutical compositions 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 mixture of a substance with a carrier since there is no invention involved in such a step. Vide Comm'r Pat. v. Farbwerke Hoechst A.G., 41 C.P.R. 9, [1964] S.C.R. 49, 25 Fox Pat. C.99. Nor can they stand as claims in respect of the invention of thioridazine itself both because claims 1 to 9 represent the full extent of the protection to which the defendant is entitled in respect of that invention and because in the context of all the claims they tend to go further than the protection to which the defendant is entitled, as defined in s. 46 of the Patent Act, in respect of the invention of thioridazine and to monopolize, independently of the other claims, compositions containing thioridazine, and thus to restrict the use of thioridazine in a particular way even by one into whose possession it may lawfully come whether by express or implied or compulsory licence [underlining added].

In its own consideration the Supreme Court also held that the composition claims did not define the invention, saying at p. 1339:

I agree with this conclusion of the learned trial judge and this makes it unnecessary to consider the further reasons he advanced against the validity of claims 10 and 11.

We thus take it as evident that the composition claims were refused because they did not define the invention. We find no indication that they were refused because the compound claims were present. The product claims were referred to solely to indicate that they were the ones which properly defined the invention present.

In the Agripat case referred to above, as published in the Patent Office Record of May 19, 1977, beginning at page xvii, and affirmed by the Federal Court, it was made quite clear that the objection to the composition claims was predicated upon the fact that they failed to define the invention, since the invention resided in the compounds. The rejection was not based upon the presence of the compound claims. The following extracts from the Commissioner's decision indicate what we have in mind:

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 Bergeon v. DeKermor Electric, 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. Ellan'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.

...

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(2), 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 & 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 Commissioner of Patents v. Farbwerke Hoechst, 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 (or 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 Commissioner of Patents v. Ciba, 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.

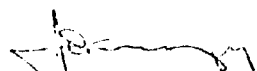
We are consequently satisfied that the real objection to composition claims in these cases is Section 36, and a holding that such claims do not properly define the invention. The objection is not one based upon the mere presence of the other claims.

We are also satisfied that the same objection arises with respect to claims 1 to 11 of this application, at least in so far as those claims cover new compounds. We are not prepared to say now what might be the situation if the composition claims were restricted to those where the compounds are old. If they are old, in all probability they have been mixed with adjuvants. Such hypothetical claims are not before us, nor have they been examined for novelty or other possible objections. Our concern is claims 1-11 inclusive, which we believe should be rejected. We also note the great breadth of claim 12, which should be considered if there is further prosecution.



G. A. Asher
Chairman,
Patent Appeal Board, Canada

I have considered the prosecution of this application, the arguments of the applicant, and the recommendation of the Patent Appeal Board. For the same reasons given by the Board, I now reject claims 1-11 inclusive. They must be removed within six months unless the Applicant takes an appeal under Section 44 of the Patent Act.



J.H.A. Gariépy
Commissioner of Patents

Dated at Hull, Quebec
this 14th. day of September, 1979

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