COMMISSIONER'S DECISION

Compound and Composition: Insect Growth Regulating Agent. A new compound, and a composition thereof mixed with acceptable carriers, useful for insect control, represent different aspects of the same invention and may be allowable in the same application, absent prior art. Rejection withdrawn.

This decision deals with Applicant's request for review by the Commissioner of Patents of the Final Action on application 393,867 (Class 260 - 466.05) filed January 11, 1982. It is assigned to The Upjohn Co. and is entitled SUBSTITUTED PHENACARBAMOYLBENZIMIDATES. The inventor is Stephen J. Nelson.

The Examiner in charge issued a Final Action on February 5, 1985 refusing to allow claims 5, 6, and 9 in the application with claims 1 to 4, 7, and 8. Claims 1 to 4, 7, and 8 have been indicated to be allowable.

The application relates to an insect growth regulating composition including a carrier, and a compound of the formula:

$$\begin{array}{c} X_1 \\ C = N - C - N \\ 0 & H \end{array}$$

$$\begin{array}{c} X_2 \\ X_3 \\ X_4 \end{array}$$

X₁ is from the group methyl, trifluoromethyl, chlorine, fluorine and bromine, X₂ is from the above group including hydrogen, R is alkyl 1 to 5 carbon atoms, X₃ and X₄ may be the same or different from the group hydrogen, chlorine and bromine, X₅ is from the group hydrogen, chlorine, bromine, and trifluoromethyl, X₆ is from the group cyano and nitro. There is a proviso that when X₁ and X₂ are chlorine or X₁ is fluorine and X₂ is hydrogen, then R, and X₃ to X₆ are respectively not 1-methylethyl, chlorine, hydrogen, chlorine and nitro; when X₁ is fluorine and X₂ is hydrogen then R, and X₃ to X₆ are respectively not 1-methylethyl, chlorine, hydrogen, and nitro; when X₁ is fluorine or methyl and X₂ is hydrogen then R, and X₃ to X₆ are respectively not 1-methylethyl, chlorine,

and nitro; and, when X_1 and X_2 are fluorine then R, and X_3 to X_6 are respectively not ethyl, chlorine, hydrogen, chlorine, and nitro. The compound can be used for control of insects in the form of compounds, or in formulations comprising a carrier that will promote application to insects, objects, or situs.

The Examiner rejects claims 5, 6 and 9, directed to insecticidal compositions, in view of Gilbert v Sandoz 64 C.P.R. (1981) 14, 8 C.P.R. (2d) (1973) 210, and Agripat v The Commissioner of Patents 52 C.P.R. (2d) 229. He considers there is "no further inventive step" in mixing the compound of claim 1 with an acceptable carrier. The Examiner feels that the decision of Shell Canada Company v The Commissioner of Patents of November 2, 1982 is relevant, and he says, in part, as follows:

. . .

The Shell Oil application presented a class of plant growth regulant compounds which were both new and old. Claims were made to the new compounds per se and to compositions containing both the new and old compounds. Following a rejection of the composition claims based on the Sandoz decision, Shell Oil maintained claims to the compositions only. These claims were rejected by the Patent Office.

The findings of the Supreme Court is set out on page 16 as follows:

"I find no obstacle in s.36 or any other provision of the Act to the grant of a patent to the appellant on these compositions."

The next sentence reads:

"I make no observation, however, on whether or not the appellant can succeed in a subsequent application for patent on a subordinate element of its invention, namely, the compounds themselves. This is not before us, the appellant having abandoned such a claim at an early stage of the proceedings."

Clearly, this portion of the $\frac{\text{Shell 0il}}{\text{of claims}}$ decision does not give guidance on the allowability $\frac{\text{of claims}}{\text{of claims}}$ to both the compound and the composition in the same application. In developing her argument Wilson J. at page 13 under the heading "The new compounds:" refers to "the Farbwerke Hoechst line of cases". She continues her analysis of these cases as follows:

"It seems to me that Mr. Justice Heald was in error when he stated that the Farbwerke Hoechst line of cases "are indistinguishable on any valid ground from the case at bar" and that the commissioner therefore "correctly... interpreted and applied the principles in those cases" to Agripat. They were, in my view, distinguishable in a very material respect, namely, that they were all cases falling within s.41 and Agripat was not. I do not think it is possible to read those cases without concluding that one of the reasons for the rejection of the composition claims in those cases was that to allow them would permit the applicants to avoid the impact of s.41 in respect of substances clearly falling within it. I agree with counsel for the appellant that these cases did not establish a

broad principle that compositions containing new compounds mixed with an inert carrier were not patentable. They did establish, however, that no inventive ingenuity is involved in mixing a compound with a carrier. Accordingly, if the compound is patented, there is no invention in the composition. That proposition, in my view, makes eminent good sense whether the substance is covered by s.41 or not and I think it affords an adequate basis for the result reached by the Federal Court of Appeal in Agripat."

"Agripat is, of course, distinguishable from the instant case in that no claim is being made for the compounds in this case."

Thus the Supreme Court clearly accepted the principle that if the compound is patented, there is no invention in the composition and, using this principle, looked with favour on the decision by the Federal Court in Agripat.

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The applicant argues that all claims are patentable in the same application, presenting his reasons, in part, as follows:

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On the basis of the Shell decision the Examiner would have to allow either claims to the novel compounds or claims to insecticidal compositions containing such compounds.

Claims to a method of controlling insects would be allowed in the same application as either claims to the novel compounds or claims to the compositions.

Thus, the allowability under Canadian practice of claims to (a) novel compounds having insecticidal activity, (b) insecticidal compositions containing such novel compounds in association with known carriers and (c) a method of controlling insects by using the compositions, is now established. The allowability of such claims is not an issue in the present rejection. The Examiner is prepared to allow claims to (a) and (c) above and would presumably allow claims to (b) and (c) on the basis of the Shell decision. The point at issue is whether or not claims to (a), (b) and (c) can be allowed in a single application.

The Shell decision, as noted above, contains the statement

"Accordingly, if the compound is patented there is no invention in the composition."

The rejection based on lack of invention in mere dilution of a new compound with a carrier might appear to be supported by this statement. However, the interpretation of this passage which the Examiner effectively now seeks to adopt does not do full justice to the Supreme Court's decision or to the applicant's present care. Considering the above passage in the context of the full decision, the Supreme Court was apparently referring to the case where an applicant seeking to obtain a patent on compositions containing an active compound in association with a carrier already had a patent on the active compound. The words quoted are, in effect, directed to a "double patenting" situation as the expression is commonly interpreted under United States practice (where an applicant cannot in an application of later date claim an invention which is not patentably distinct from his own invention already patented on an earlier application) or possibly an overlap situation under Canadian practice. Without such a provision, an applicant could file a series of applications on

successive dates based on the same discovery of utility, to claim (a) novel compounds, (b) compositions containing them and (c) the method of using the compositions. Such a series of applications could have the effect of prolonging the term of patent protection based on a single discovery of utility. An unfair advantage might thereby be secured.

However, in the present application the three types of claims have the same date. There is no question of "double patenting". The applicant is not seeking to secure an unfair advantage by extending the term of his monopoly by securing patents of later dates based on the same invention. On the contrary, he is simply seeking to safeguard his position on the basis of the fundamental difference between product claims and insecticidal composition claims. If, later in the life of the patent, one or more compounds within a product claim are found to be old but the prior art disclosure of the compounds does not refer to insecticidal utility, the product claim could be invalidated whereas a corresponding insecticidal composition claim could stand. The simple statement, without any qualification, that there is no inventive ingenuity involved in mixing a compound with a carrier does not do justice to the distinction between compound and composition claims just mentioned. There is clearly an important difference between the two types of claims in the circumstances outlined above.

Present claims 5, 6 and 9 are in fact directed to an aspect of the invention claimed in claim 1. The disclosure of a utility for the novel compounds entitles the applicant under Canadian practice to an unrestricted claim to the compounds per se. The fact that the invention, based on the discovery of insecticidal utility for the compounds, can be claimed in various ways which are closely associated with the discovery should not preclude the inclusion of claims to separate aspects of the same invention.

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... In Canada, prior to the <u>Shell</u> decision, the Patent Office would accept in the same application claims to a compound and a claim to a method for its use. However, when a claim to a compound has been found allowable to the inventor in one application, then claims in a different application of the same inventor to methods of using that compound which are obvious from the utility disclosed for the compound, and upon which utility the patentability of the compound was predicated, are not allowed. This practice follows the "double patenting" practice of the United States Patent Office referred to above.

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... It is believed that no meaningful distinction can now be drawn between the allowability of method of use claims as just discussed, and the allowability in the same application, of claims to insecticidal compositions. Both represent aspects of the same invention. Neither involve the application of inventive ingenuity resulting in a separate invention. Method of use claims have previously been allowed in the same application as compound claims and it is respectfully submitted that, on the same basis, claims 5, 6 and 9 are allowable in the present application.

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The issue before the board is whether or not claims 5, 6, and 9, directed to insecticidal compositions, are allowable in the same application as claims 1 to 4, 7, and 8 which are directed to the new compounds that may be used in the compositions. Claims 1 and 5 read:

1. A compound of the formula:

wherein X1 is selected from the group consisting of methyl, trifluoromethyl, chlorine, fluorine and bromine; X2 is selected from the group consisting of hydrogen, methyl, trifluoromethyl, chlorine, fluorine and bromine; R is alkyl of from 1 to 5 carbon atoms; X3 and X4 can be the same or different and are selected from the group consisting of hydrogen, chlorine and bromine; X5 is selected from the group consisting of hydrogen, chlorine, bromine and trifluoromethyl; and x_6 is selected from the group consisting of cyano and nitro; with the proviso that when X1 and X2 are chlorine or when X1 is fluorine and X2 is hydrogen then R, X3, X4, X5 and X6 are respectively not 1-methylethyl, chlorine, hydrogen, chlorine and nitro; with the further proviso that when X_1 is fluorine and X_2 is hydrogen then R, X_3 , X_4 , X_5 and X_6 are respectively not 1-methylethyl, chlorine, hydrogen, hydrogen and nitro; and with the further proviso that when $X_{\hat{\mathbf{I}}}$ is fluorine or methyl and X_2 is hydrogen then R, X_3 , X_4 , X_5 and X_6 are respectively not ethyl, hydrogen, hydrogen, hydrogen and nitro; and with the proviso that when X1 and X2 are fluorine, then R, X3, X4, X5 and X6 are respectively not ethyl, chlorine, hydrogen, chlorine and nitro.

5. Formulations for pest control comprising an adjuvant carrier and as active ingredient a biologically effective amount of one or more compounds of the formula:

wherein X1 is selected from the group consisting of methyl, trifluoromethyl, chlorine, fluorine and bromine; X2 is selected from the group consisting of hydrogen, methyl, trifluoromethyl, chlorine, fluorine and bromine; R is alkyl of from 1 to 5 carbon atoms; X3 and X4 can be the same or different and are selected from the group consisting of hydrogen, chlorine and bromine; X5 is selected from the group consisting of hydrogen, chlorine, bromine and trifluoromethyl; and X6 is selected from the group consisting of cyano and nitro; with the proviso that when X1 and X_2 are chlorine or when X_1 is fluorine and X_2 is hydrogen then R, x_3 , x_4 , x_5 and x_6 are respectively not 1-methylethyl, chlorine, hydrogen, chlorine and nitro; with the further proviso that when X1 is fluorine and X2 is hydrogen then R, X3, X4, X5 and X6 are respectively not 1-methylethyl, chlorine, hydrogen, hydrogen and nitro; and with the further proviso that when X_1 is fluorine or methyl and X2 is hydrogen then R, X3, X4, X5 and X6 are respectively not ethyl, hydrogen, hydrogen, hydrogen and nitro; and with the proviso that when X1 and X2 are fluorine, then R, X3, X4, X5 and X6 are respectively not ethyl, chlorine, hydrogen, chlorine and nitro.

In the Shell Oil case, Mme. Justice Wilson considered the Farbwerke Hoechst line of cases as falling with Section 41, whereas Agripat did not. She noted that these Section 41 cases did not establish a broad principle that "compositions containing new compounds mixed with an inert carrier were not patentable". We learn from her remarks that regardless of whether a substance is covered by Section 41 or not, when a compound is patented, there is no invention in another application in the composition containing that compound for the same use.

The Applicant argues he is attempting to safeguard his position concerning the difference between product claims and insecticidal compositions. He points out that if one or more compounds within a product claim is later shown to be old but there is no disclosure of insecticidal activity for the old compound, then his reasoning is that should the product claim be invalidated, he would be assured of some protection if his claim to an insecticidal composition were to remain. He believes Shell Oil provides neither an unqualified statement that there is no inventive ingenuity in mixing a compound with a carrier, nor an example that serves to limit the claiming of the compound and the composition claims in one application in the circumstances he outlines above.

The Applicant indicates that in his view of Canadian practice, it is possible to claim various aspects of the same invention in one application. He notes that a claim to a compound and a claim to its method of use are acceptable in one application. He argues that claims to a method of use and claims to insecticidal compositions are both "...predicated on the same utility as claims to the compound per se." He reasons no meaningful distinction can be drawn between these two types of claims. He concludes they should be permissible in one application, stressing they are aspects of the same invention.

We consider now, Applicant's concern that an old, later found compound may fall within his composition claim. With respect to retaining claims to an insecticidal composition having an old compound as an active ingredient, we look to Shell Oil. Mme. Justice Wilson presented her views by summing up the appellant's arguments in that case in the following passage:

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"I recognize that these compounds are old; I acknowledge that there is nothing inventive in mixing them with these adjuvants once their properties as plant growth regulators have been discovered; but I have discovered these properties in those old compounds and I want a patent on the practical embodiment of my invention".

She then concluded:

I think he is entitled to receive it.

We find direction from the above passage for the situation before us and for the situation posing concerns to the Applicant. We believe it shows that when an application describes that an old compound and a new compound are each found to have the same properties, for example here as a growth retardant for insects, there is an inventive purpose that interrelates them within that application. We derive too from Shell Oil that when such compounds are mixed with an appropriate adjuvant to provide a practical embodiment of the invention, claims to the resulting compositions may be permissible within the same application. We are persuaded claims to these kinds of compositions should be viewed as aspects of the same invention.

We believe the overriding consideration in assessing Applicant's invention, must be the overall discovery made by Applicant. In our view, mixing the new compound within the scope of Applicant's invention represents but one aspect, and not the full extent, of the invention. Applicant has discovered a means of regulating insect growth and has expressed this in claims 5, 6, and 9. The non-rejected claims, being in Applicant's own application do not form part of prior art, and therefore they are not an obstacle to the grant of a patent for claims 5, 6, and 9. We view the two groups as aspects of the same invention. We note too that no prior art has been cited, and we make no comments on the allowability of the claims.

We find further guidance in determining whether or not claims 5, 6, and 9 may be allowable with the other claims in the application, from Shell Oil, in the reasoning developed therein in view of Lawson v The Commissioner of Patents (1970) 62 C.P.R. 101 at 109. Mme. Justice Wilson looked at the reasoning set down by Mr. Justice Cattanach in the following passage from Lawson:

In the earlier development of patent law, it was considered that and invention must be a vendible substance and that unless a new mode of operation created a new substance the invention was not entitled to a patent, but if a new operation created a new substance the patentable invention was the substance and not the operation by which it was produced. This was the confusion of the idea of the end with that of means. However, it is now accepted that if the invention is the means and not the end, the inventor is entitled to a patent on the means.

We view claims 5, 6, and 9 as one aspect of Applicant's invention that forms part of the means for achieving the end, just as the particular compound expressed in claims 1, 2 and 7, and the particular method found in claim 3, 4, and 8, are other aspects of the inventive means of the application. When viewed in the overall concept of Applicant's inventive idea, we find no meaningful distinction exists between the three aspects defined in the claims to the compound, the composition, and the method of use in relation to the invention disclosed, that would prevent their acceptance in the same application.

We recommend that the rejection of claims 5, 6, and 9 for not being directed to the same inventive concept in claims 1 to 4, 7, and 8, be withdrawn.

M.G. Brown

Acting Director

Patent Appeal Board

S.D. Kot Member

I concur with the findings and recommendation of the Patent Appeal Board. Accordingly, I withdraw the rejection of the application and I remand it for prosecution consistent with the recommendation.

J.H.A. Gariépy

Commissioner of Patents

Dated at Hull, Quebec this 9 day of October 1986

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