COMMISSIONER'S DECISION

OBVIOUSNESS: Method and Composition for Tobacco Sucker Control

The composition's claims, which related to mixtures of alcohols with a carrier, were refused for failing to define a patentable advance in the art over the references cited.

Final Action: Affirmed.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated June 29, 1976, on application 955,790 (Class 71-12.0). The application was filed on March 24, 1966 in the name of Tien C. Tso et al, and is entitled "Method And Compositions For Tobacco Sucker Control". The Patent Appeal Board conducted a Hearing on December 8, 1976, at which Mr. M. Marcus represented the applicant. Also in attendance was Messrs. Rice and Moss.

The application relates to a method of inhibiting the growth of suckers in tobacco plants by applying to said plants an effective amount of a saturated C_6 to C_8 alcohol, and to mixtures of a growth inhibiting composition.

In The Final Action the examiner refused composition claims 23 to 32 in view of the following prior art.

References Re-Applied

"Retardation of Evaporation by Monolayers" Lamar, (1962) pages 205 and 224-230

United States Patents

3,205,059	Sept. 7, 1965	Cl. 71-2.7	Robertson
(corresponds to Belgian 615,406 April 13, 1962)			
2,903,330	Sept. 8, 1959	Cl. 21-60.5	Dressler
2,164,723	July 4, 1939	Cl. 252-6	Schrauth et al
2,054,257	Sept.15, 1936	Cl. 252-6	Heuter

C.A. 44,8053 d
C.A. 50,13367 i
C.A. 47,11885 f
C.A. 51,10180 c

In the action the examiner stated (in part):

> The Lamar reference discloses various C_{12} to C_{24} fatty alcohol emulsions including alcohol-Tween emulsions. Clearly, the Lamar reference shows fatty alcohol emulsions in general to be known. Applicant's amendment letter of April 24, 1970 clearly admits that the alcohol emulsions are old. See also amendment letter of November 6, 1975, page 1 "while it is admitted that emulsions of fatty alcohols may be old...".
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> United States Patent 3,205,059 to Robertson relates to emulsions of fatty alcohols used to reduce transpiration in plants.
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> United States Patent 2,903,330 to Dressler relates to emulsions of fatty alcohols used to prevent evaporation of water from for example lakes.
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> United States Patent 2,164,723 to Schrauth et al relates to emulsions of alcohols useful as bases for therapeutic and cosmetic compositions.
>
> United States Patent 2,054,257 to Heuter relates to the emulsification of fatty acids, their esters and alcohols (for example for the treating of textiles).
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> All four of the Chemical Abstracts cited teach emulsions of fatty alcohols.
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> The above group of citations relate in general to emulsions of alcohols and other similar fatty substances in water. These references clearly show a composition of emulsified fatty alcohols is old. Accordingly claims 23-32 are refused as being obvious in view of the prior applied art.

In response to the Final Action the applicant discussed and cited the case law on "selection" patents. He also stated (in part):

...

> Similarly, in this case, applicants have claimed a <u>different</u> product or composition (due to the very specific, selective nature of the fatty alcohols). Since the compositions of the prior art were not used for tobacco desuckering, that point should be sufficient to dismiss any thought of the prior art anticipating the applicants claims. Clearly, the Examiner <u>agrees</u> with applicants submission of unobvious use due to a similar composition, since the Examiner states:

> "there has never been any suggestion that the cited prior art has taught the use of fatty alcohol compositions as being useful for tobacco desuckering."

This case is moreover to be distinguished from the analogous case of; Re application No. 948,406 (Patent 968,176) 22 C.P.R. (2d) 245 decided on May 24, 1972. In that case, a claim directed generically to a composition for inhibiting the growth of suckers in tobacco plants comprising a mixture of an effective amount of a suitable emulsifying agent and at least one lower alkyl ester of a C_6 to C_{18} fatty acid was held to be "substantially taught" by two references which disclosed, in the one hand aqueous emulsions of methyl and ethyl linoleate, and on the other hand emulsified fatty acid esters, e.g., oil-in-water emulsions containing methyl, isopropyl or butyl esters of fatty acids such as isopropyl palmitate for use as emollients. In the present case, however, applicant is not claiming a generic invention, but is claiming a selection invention, within the broad ambit of the prior art. Since it is applicants submission that he has a selection patent, the general principles governing the validity of selection patents, were as discussed above in I.G. Farben Industry A.G.'s patents 47 R.P.C. 289 at page 332 will now be reiterated: (1) the selection must be based on securing some advantage by the use of the selected members; (2) all the selected members must possess the required advantage; but a few exceptions here and there would not be sufficient to make the patent invalid; (3) the selection must be for "a quality of a special character" which is peculiar to the selected group and this quality must not be one which would be obvious to an expert. It is also necessary "for the patentee to define in clear terms the nature of the characteristic which he alleges to be possessed by the selection ... he must disclose an invention; he fails to do this in the case of a selection for special characteristics if he does not adequately define them."

...

In summary, therefore applicants claims are for a new composition, specially adapted to an unexpected use. The particular composition is new since the prior art does not specifically teach a C_8 - C_{12} fatty alcohol in combination with a wetting agent; that particular composition inherits additional novelty since it is a selection from within the ambit of a broad claim of compounds. The particular composition is an "invention" since it possess admitted unexpected unobvious utility. Consequently, it is submitted that all the requirements of patentability have been met and that the composition claims are patentable.

Claims 1 to 22, which refer to a method of inhibiting the growth of suckers in tobacco plants, have been found allowable. Claim 1 reads as follows:

> A method of inhibiting the growth of suckers in tobacco plants which comprises applying to said plants an effective amount of a saturated C_6 to C_{18} alcohol or a mixture of two or more such alcohols.

We are satisfied that the discovery that the known C_6 to C_{18} alcohols could be effectively used for inhibiting the growth of suckers in tobacco plants is the inventive step which gives to the invention the necessary merit (see Raleigh Cycle Co. Ltd. v. H. Miller & Co. Ltd., (1946) 63 R.P.C. 113).

In a situation of this kind the applicant may obtain claims to the method of use, such as those already found allowable. He may also obtain novel composition claims specifically adapted to the new discovery. The novel composition however, must not just be something artificially created to avoid the prior art. It must be an integral part of the invention. For example, "gold dust" added to an old composition might make it novel, but unless its presence contributes to the invention it would not render the new composition patentable.

Mr. Marcus and Mr. Rice raised some interesting points at the Hearing which we shall carefully consider. Mr. Marcus conceded early in his presentation that there was, at least in part, some substance to the examiners refusal. He conceded that "a portion of the claims now on file directed exclusively to the single fatty alcohols are not clearly patentably over the prior art." He then submitted amended claims 23 to 32 for consideration by the Board. These claims are restricted to a wetting agent and a mixture of alcohols.

The Board must now consider whether or not the newly amended claims represent a novel composition specifically adapted to the new discovery. Claim 23 reads as follows:

> A tobacco plant sucker growth inhibiting composition comprising a mixture of a wetting agent, and a fatty alcohol component containing mixture of at least two C_8, C_9, C_{10}, C_{11} or C_{12} fatty alcohols.

At the Hearing Mr. Marcus argued that he was concerned with "selection" type claims and layed down criteria for them. First, "a substantial advantage is to be secured by the selected members." The question asked by the Board was, "Do they have any substantial advantage over the individual alcohols - that you are now presumably conceding are not patentable." The answer was, "I don't think so - we are not prepared to say that a mixture in the C_8 to C_{10} range would have an advantage over a single species." Surely then, the selected members, as claimed, do not meet the "substantial advantage" criteria.

Another criteria was that, "The selection must be in respect to a quality of a special character which can fairly be said to be peculiar to the selected group." In our view they are not peculiar to this group, and as stated at the Hearing, "they are also peculiar to the compositions you are not claiming - as in Heuter. Single alcohol mixed with a wetting agent have the same properties as you are claiming here." The applicant agreed that "C_8, C_{10} and C_{12} alone would provide this particular utility." In his summation at the Hearing Mr. Rice stated that, "I don't think we want to make any representation that the mixture is better than the C_8 alcohol alone, the C_{10} alone, or the C_{12} alone.... We represent that the C_8 and C_{12} range is efficacious in de-suckering tobacco and the mixture is also effective.... We really don't want to try and distinguish the mixture from any one of the 8 to 12 groups as far as its efficacy is concerned."

In the jurisprudence we find that, "a mere selection among possible alternatives is not subject matter. A selection to be patentable must select in order to secure some advantage or avoid some disadvantage. It follows that in describing and ascertaining the nature of an invention consisting in the selection between possible alternatives, the advantages to be gained, or the disadvantages to be avoided, ought to be referred to." (see Clyde Nail Co. Ltd. v. Russell (1916) 33 R.P.C. 291).

The disclosure, as filed, is silent about the specific selection now appearing in the amended claims. In fact it would seem to indicate a different view. For example, at page 7, lines 14 f.f., we read: "From experimental results, fatty alcohols with various carbon chain lengths appeared to show little variability in their effectiveness on sucker control." Claim 1 refers to the use of alcohols from C6 to C18. It appears clear from the specification as filed that this range is the real selection related to the discovery of the new utility. Restricting the claims to at least two alcohols (claim 23) in an attempt to avoid the prior art, is not, in our view, a true selection.

In the circumstances we are not persuaded that the evidence before us lays the formal foundation for allowing claims (23 to 32) on any basis of there being a "selection" patent. Moreover, the present composition claims are no more pertinent to the specific utility of the invention than the known compositions in the prior art.

It is also clear from the cited art that emulsified fatty alcohol compositions (i.e. an alcohol plus a wetting agent) are known in the art, and the applicant has recognized this. To merely take two alchols and mix them with a wetting agent is not materially different from using one alcohol with a wetting agent, unless there is a new or unexpected result. As the evidence shows, no such result was achieved. The result, as indicated above, is the same. The applicant also stated that when you manufacture C8 and C10, for example, "you do not get a pure mixture of alcohols ... it is a nuisance to separate C8 and C10." Surely, this admission is an indication of lack of novelty in the selection of these two alcohols.

The Board places on record a reference to a document, as being of interest only, which refers to a mixture of C10 and C12 alcohols (see H. Luther and W. Hiemenz, Chem. Eng. Tech. 29.530-5 (1957).

Despite the contentions of the applicant we are not satisfied that the claims 23 to 32 meets the criteria for a selection patent. On the other hand we are satisfied that the alleged invention defined in these claims is substantially taught in the cited references. The claim to an alleged novel composition, in our view, is really an artificial one without any real foundation. In any event, according to the applicant, it is routine procedure for a mixture of alcohols to be manufactured at the same time in a single batch.

We recommend that the decision to refuse present claims 23 to 32 be affirmed, and that amended claims 23 to 32 should not be entered in this application.

J.F. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have studied the prosecution of this application and reviewed the recommendations of the Patent Appeal Board. In the circumstances I have decided to refuse instant claims 23 to 32 and not to accept amended claims 23 to 32. The applicant has six months within which to cancel claims 23 to 32, or to appeal this decision under the provision of Section 44 of the Patent Act.

J.H.A. Gariépy
Commissioner of Patents

Dates at Hull, Quebec
this 24th day of February, 1977

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