

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte FRANK J. LACHUT

Appeal No. 2001-0933
Application No. 09/205,530

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and LORIN, Administrative Patent Judges.

LORIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-46, all the claims pending in the application.¹

¹ Pursuant to 35 U.S.C. § 6(b), we review the adverse decision of the examiner. In doing so, we have considered the record, including:

- Final Rejection (paper no. 7);
- Advisory Action (paper no. 9);
- Second Advisory Action (paper no. 11);
- Brief (paper no. 12);
- Examiner's Answer (paper no. 13); and,
- Reply Brief (paper no. 15).

Claims 1, 9, 16, 17, 25, 35, 36, and 46 are illustrative of the claims on appeal and read as follows:

1. A composition comprising: (1) from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid and, (2) from about 5 to about 50% by weight of an emulsifier package wherein said emulsifier package is comprised of (a) a nonionic surfactant selected from the group consisting of an ethoxylated castor oil, an ethoxylated-propoxylated castor oil, an ethylene-propylene block copolymer, an ethoxylated-propoxylated alkyl phenol, an ethoxylated sorbitan fatty acid ester, a sorbitan fatty acid ester and combinations thereof and, (b) an anionic surfactant selected from the group consisting of an ethoxylated partial phosphate ester, alkyl sulfate, an alkyl ether sulfate, a branched alkyl benzene sulfonate, a linear alkyl benzene sulfonate, an alpha olefin sulfonate and combinations thereof.

9. A composition comprised of: (1) from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid and (2) from about 5 to about 50% by weight of an emulsifier package wherein the emulsifier package is comprised of: (a) from about 50% to about 94% by weight of the emulsifier package of an ethoxylated sorbitan fatty acid ester having from 1 to 30 moles of EO; (b) from about 1% to about 20% by weight of the emulsifier package of a sorbitan fatty acid ester; (c) from about 5% to about 35% by weight of the emulsifier package of an ethoxylated partial phosphate ester.

16. A composition comprised of from about 75% to about 76% of Ethyl Canolate; from about 16% to about 18% of POE(20) Sorbitan Trioleate; from about 1% to about 2% of Sorbitan Trioleate; from about 4% to about 5% of phosphoric acid partially esterified with nonyl phenol (EO)-9.

17. A composition which is the product of the process which comprises mixing: (1) from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid and, (2) from about 5 to about 50% by weight of an emulsifier package wherein said emulsifier package is comprised of (a) a nonionic surfactant selected from the group consisting of an ethoxylated castor oil, an ethoxylated-propoxylated castor oil, an ethylene-propylene block copolymer, an ethoxylated-propoxylated alkyl phenol, an ethoxylated sorbitan fatty acid ester, a sorbitan fatty acid ester and combinations thereof and, (b) an anionic surfactant selected from the group consisting of an ethoxylated partial phosphate ester, alkyl sulfate, an alkyl ether sulfate, a branched alkyl benzene sulfonate, a linear alkyl benzene sulfonate, an alpha olefin sulfonate and combinations thereof.

25. A pesticide composition comprised of an effective amount of a biologically active ingredient and a composition comprised of: (1) from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid and, (2) from about 5 to about 50%

by weight of an emulsifier package wherein said emulsifier package is comprised of (a) a nonionic surfactant selected from the group consisting of an ethoxylated castor oil, an ethoxylated-propoxylated castor oil, an ethylene-propylene block copolymer, an ethoxylated-propoxylated alkyl phenol, an ethoxylated sorbitan fatty acid ester, a sorbitan fatty acid ester and combinations thereof and, (b) an anionic surfactant selected from the group consisting of an ethoxylated partial phosphate ester, alkyl sulfate, an alkyl ether sulfate, a branched alkyl benzene sulfonate, a linear alkyl benzene sulfonate, an alpha olefin sulfonate and combinations thereof.

35. A pesticide composition comprised of an effective amount of a biologically active ingredient and a composition comprised of from about 75% to about 76% of ethyl canolate; from about 16% to about 18% of POE(20) sorbitan trioleate; from about 1% to about 2% of sorbitan trioleate; from about 4% to about 5% of phosphoric acid partially esterified with nonyl phenol (EO)-9.

36. A process for treating a target substrate comprising contacting said substrate with a pesticide composition comprised of an effective amount of a biologically active ingredient and a composition comprised of: (1) from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid and, (2) from about 5 to about 50% by weight of an emulsifier package wherein said emulsifier package is comprised of (a) a nonionic surfactant selected from the group consisting of an ethoxylated castor oil, an ethoxylated-propoxylated castor oil, an ethylene-propylene block copolymer, an ethoxylated-propoxylated alkyl phenol, an ethoxylated sorbitan fatty acid ester, a sorbitan fatty acid ester and combinations thereof and, (b) an anionic surfactant selected from the group consisting of an ethoxylated partial phosphate ester, alkyl sulfate, an alkyl ether sulfate, a branched alkyl benzene sulfonate, a linear alkyl benzene sulfonate, an alpha olefin sulfonate and combinations thereof.

46. A process for treating a target substrate comprising contacting said substrate with a pesticide composition comprised of an effective amount of a biologically active ingredient and a composition comprised of from about 75% to about 76% of ethyl canolate; from about 16% to about 18% of POE(20) sorbitan trioleate; from about 1% to about 2% of sorbitan trioleate; from about 4% to about 5% of phosphoric acid partially esterified with nonyl phenol (EO)-9.

The references relied upon by the examiner are:

Hazen et al. (Hazen)

5,084,087

Jan. 28, 1992

Claims 1-46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hazen.

DISCUSSION

The issue for our review is whether the claimed invention is properly rejectable under § 103 as being unpatentable over Hazen. After careful review of the record, we find the examiner's position raised in this appeal is not amenable to a meaningful review. Under the present circumstances, the position put forward by the examiner in support of the rejections is insufficient for the reasons infra. Since the Board serves as a board of review, not a de novo examination tribunal (35 U.S.C. § 6(b)), it is necessary that we understand examiner's position and that that position be thoroughly presented before we make that review. Accordingly, we vacate the rejection and remand the application to the examiner so that the issue of obviousness can be reconsidered in light of our discussion and, if reinstated, supported with proper grounds.

The claimed invention is directed to a composition that can be used as an agricultural adjuvant in, for example, herbicide formulations. The claimed composition, as represented by claim 1, comprises

1. about 50-95% by weight of a lower alkanol ester of a fatty acid; and,
2. about 5-50% by weight of an emulsifier comprising:
 - a. a nonionic surfactant; and,
 - b. an anionic surfactant.

It is axiomatic that:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this

background, the obviousness or nonobviousness of the subject matter is determined.

Graham v. John Deere, 383 U.S 1, 6, 148 USPQ 459, 467 (US 1966).

Regarding the scope and content of Hazen, examiner (Examiner's Answer, p. 4) points out that Hazen is directed to adjuvant-containing herbicide formulations and discloses a formulation comprising an herbicide and

1. about 100 g/L of a lower alkanol ester of a fatty acid (col. 5, lines 7-15);
2. about 5-100 g/L of an emulsifier comprising:
 - a. 95-60% of a nonionic surfactant (col. 3, lines 37-38); and,
 - b. 5-40% of an anionic surfactant (col. 3, lines 40-41).

However, regarding the differences between Hazen and the claims, examiner focuses solely on the lower alkanol ester of a fatty acid component and appears to ignore the anionic and nonionic surfactants of the claimed composition. Whether or not there is a difference between the surfactants taught in Hazen and those claimed is not explained. For example, the claimed invention is limited to a nonionic surfactant selected from the group consisting of:

- an ethoxylated castor oil;
- an ethoxylated-propoxylated castor oil;
- an ethylene-propylene block copolymer;
- an ethoxylated-propoxylated alkyl phenol;
- an ethoxylated sorbitan fatty acid ester;
- a sorbitan fatty acid ester; and,
- combinations thereof.

Hazen discloses nonionic polyoxyalkylenes. Whether or not there is a difference between the claimed nonionic surfactants and Hazen's nonionic polyoxyalkylenes is not explained. In establishing a prima facie case of obviousness, the initial burden

rests with the examiner to establish a prima facie case of obviousness of the claimed invention over Hazen. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Accordingly, it is incumbent on the examiner to address all the limitations in the claims and determine if differences exist between any claimed limitation and what is disclosed in Hazen. Since no indication is given as to examiner's position on the claimed surfactants, not all the differences between the claimed invention and Hazen have been ascertained and, therefore, as a result, the prima facie case of obviousness presented to us for our review is incomplete.

We also question examiner's position with regard to the percentage of lower alkanol ester of a fatty acid in the claimed composition. There is no dispute that Hazen teaches this component but examiner's position with respect to whether Hazen renders obvious the claimed percentage of this alkanol ester of a fatty acid is unclear.

The claimed invention calls for "from about 50 to about 95% by weight of a lower alkanol ester of a fatty acid". Examiner (Examiner's Answer, p. 4) indicates that Hazen states that "the lower alkanol ester should preferably comprise about 10 weight percent or more, greater than about than about 100 g/L of the total ready-to-dilute system." See Hazen, col. 5, lines 7-15. On its face, it would appear that Hazen discloses a much broader range than what is claimed (10% or more v. 50-95%). Accordingly, examiner would have the burden of establishing that a composition having an amount of lower alkanol ester within the claimed more

narrow range would have been obvious over Hazen, notwithstanding its broader disclosure. However, that issue is not addressed.

Instead, examiner (examiner's answer, pp. 4-5) argues that

10% is set as a lower limit for the ester component only if additional paraffinic or aromatic solvents are also used, as in [Hazen]. In the examples, this is not the case; thus the concentration of the ester component – being the only solvent used herein – is necessarily higher and not explicitly stated.

Then, using the information given in the Hazen examples, examiner makes a calculation the result of which leads the examiner (Examiner's Answer, p. 5) to conclude that "the volume of methyl ester mixture used in the Hazen et al examples to reach a final volume of 1000 ml is well within appellant's range." Accordingly, rather than establishing that a composition having an amount of lower alkanol ester within the claimed more narrow range would have been obvious over Hazen, examiner appears to be making the case that Hazen anticipates the claimed composition. In fact, we have carefully reviewed the discussion accompanying the rejection set forth in the Examiner's Answer and cannot find a determination of obviousness. There is no explanation of how one of ordinary skill would have been led to employ an amount of lower alkanol ester of a fatty acid that would fall within the claimed range in order to establish a prima facie case of obviousness. Given that the rejection has been made under 35 USC § 103, and not under § 102, a determination of obviousness must be made and, since that has not been done, examiner's position remains unclear.

Furthermore, examiner's analysis of Hazen is confusing. As best as we can understand, examiner has taken the concentrations for each component for the

basic formulation disclosed in Hazen's examples and determined the amount of ester, when used as a solvent, that would be needed to bring the basic formulation to a liter of volume. Examiner then appears to have determined that the volume that is associated with the amount of solvent ester in Hazen's final 1 liter formulation would correspond to a level of 50% within the claimed range. However, we agree with appellant (Reply Brief) that the calculation assumes the same density for all the components in Hazen's composition and that, therefore, the resulting percentage of ester is questionable at best.

. Also, we do not understand why examiner has focused on the 10% level disclosed in Hazen. That defines the proportion of alkanol ester in a formulation that includes the herbicide. In the claims, the 50 to 95% level for the alkanol ester component is coupled with the 5 to 95% for the emulsifier component, absent any herbicide. Accordingly, rather than focusing on percentages, the better approach would be to compare actual weights for those two components for a given volume. In that light, we discover that Hazen discloses a composition comprising about 100 g/L of a lower alkanol ester of a fatty acid (col. 10, line 5) and, for example, 100 g/L of an emulsifier (col. 3, line 43); i.e., a 50:50 weight ratio for each liter of mixture. Given that the claimed invention too covers a composition with a 50:50 weight ratio, there would appear to be no difference between the claimed and Hazen's amounts of lower alkanol ester of a fatty acid in the adjuvant composition.

For these reasons, we consider examiner's position in support of the rejections to be unclear and in need of a thorough re-evaluation.

Finally, in our view, examiner has raised a new point in the Examiner's Answer. The entire discussion that deals with the calculation of the amount of lower alkanol ester of a fatty acid used in Hazen's examples is new and should have and could have been raised earlier. In the Final Rejection, the claims were rejected over Hazen in view of Killick. Examiner appeared to admit that Hazen did not suggest the claimed percentage of fatty acid ester because Killick was applied as showing using ethyl esters at 50-80% of the adjuvant composition (see Final Rejection, p. 3). Appellant argued that "[n]owhere in the disclosure of [Hazen] is it taught or suggested that the claimed amount of ester is to be used, i.e., from 50 to 95% by weight" (Paper no. 8, Response to Final Rejection, p. 2) and understood Killick to have been applied to overcome that lack teaching or suggestion in Hazen. Subsequently, Killick was withdrawn (see Advisory Action). Then, for the first time in the Examiner's Answer, examiner makes the case, through a calculation, that the claimed percentage of fatty acid ester is in fact covered by the Hazen disclosure. Examiner has changed the thrust of the rejection. Examiner's reliance on Hazen to now argue that the claimed percentage of fatty acid ester is in fact disclosed is new and could have been raised earlier. We do not find that appellant has had a reasonable opportunity to address this new point. See In re Kronig, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976). That opportunity is now provided as a result of our vacating of the rejections and remanding the application to the examiner for further clarification.

Upon return of the application, the examiner should step back and reassess the patentability of the pending claims in view of the comments made supra.

Examiner should reformulate the rejection and provide a clear and consistent analysis that explains how the prior art disclosure either anticipates the claimed invention or would lead one of ordinary skill to modify the mixture of Hazen in such that it would suggest the claimed composition. To summarize, examiner should 1) address every limitation in the claims and establish differences between the claimed composition and Hazen and, if differences exist, explain why Hazen provides substantial evidence supporting a prima facie case of obviousness of the claimed composition; or 2) determine if Hazen identically teaches all the claimed components and weight percentages, including that of the ester component and, if so, consider a rejection over Hazen under 35 U.S.C § 102 on the grounds that Hazen anticipates the claimed invention.

For the foregoing reasons, we vacate the rejection under § 103 and remand to give the examiner an opportunity to consider the issues discussed herein and take appropriate action not inconsistent with the views expressed herein. We emphasize that we vacate examiner's rejections. This means that the instant rejection no longer exists and the issues set forth herein cannot be satisfied by a Supplemental Examiner's Answer. See Ex parte Zambrano, 58 USPQ2d 1312, 1313 (Bd. Pat. App. & Int. 2000).

This application, by virtue of its “special” status, requires an immediate action. MPEP § 708.01 (7th Ed., July 1998). It is important that the Board be informed promptly of any action affecting the appeal in this case.

VACATED AND REMANDED

SHERMAN D. WINTERS)	
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)	
)	
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