THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES J. SCHWIND, S. Q. ABBAS RIZVI
and STEPHEN A. DIBIASE

Appeal No. 95-4081
Application 08/071,895[1]

ON BRIEF

Before: McKELVEY, Senior Administrative Patent Judge, and SCHAFER and LEE, Administrative Patent Judges.

McKELVEY, Senior Administrative Patent Judge.

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[1] Application for patent filed June 3, 1993. Applicants claim priority under 35 U.S.C. § 120 based on application 07/804,273, filed December 6, 1991. The real party in interest appears to be The Lubrizol Corporation.

Decision on appeal under 35 U.S.C. § 134

The appeal is from a decision of the Primary Examiner rejecting claims 2-9, 11-20, 22-23, 25-30, 32 and 34-35. We affirm as to claims 2-9, 11-20, 22-23, 25-30 and 35 and reverse as to claims 32 and 34.

A. Introduction

37 CFR § 1.192(c)(6)(C)(iv) (1994)

Applicants' Appeal Brief (Paper 13) was filed on November 21, 1994. At that time, Rule 192 required an applicant to present certain arguments in an appeal brief. Specifically, Rule 192(c)(6)(C)(iv) (1994) required an applicant to do the following with respect to each appealed rejection under 35 U.S.C. § 103 (emphasis added):

> For each rejection under 35 U.S.C. 103, the argument shall specify the errors in the rejection and, if appropriate, the specific limitations in the rejected claims which are not described in the prior art relied on in the rejection, and shall explain how such limitations render the claimed subject matter unobvious over the prior art. If the rejection is based upon a combination of references, the argument shall explain why the references, taken as a whole, do not suggest the claimed subject matter, and shall include, as may be appropriate, an explanation of why features disclosed in one reference

> may not properly be combined with features disclosed in another reference.

The rule required that an applicant "specify the errors in the rejection." The intended purpose of the rule was to make the resolution of appeals more efficient and to avoid the need for deciding issues not raised by an applicant in an appeal.

In view of the provisions of Rule 192 (1994), we will decide the appeal on the basis of the arguments actually made by applicants, as opposed to arguments which might have been--but were not made. Compare Keebler Co. v. Murray Bakery Products, 866 F.2d 1386, 1388, 9 USPQ2d 1736, 1738 (Fed. Cir. 1989) (since Keebler failed to tell the TTAB it was interested in Murray's "intent," it could not use intent as a basis for showing "error" by the TTAB; prescience is not a required characteristic of the board and the board need not divine all possible afterthoughts of counsel that might be asserted for the first time on appeal).

According to their Appeal Brief, "Appellants request that the claims be considered separately." We decline to consider each claim separately, because in their Appeal Brief, applicants present arguments equally applicable to all

lubricating or functional composition claims. We have found no separate arguments with respect to any specific lubricating composition claims, concentrate claim 30 or grease composition claim 35. Separate arguments, however, have been presented with respect to:

(1) claims 20[2] and 25 (page 6) and

(2) claims 32[3] and 34 (page 6).

Accordingly, we will consider the broadest lubricating composition claim, which is claim 26. All claims, except claims 20, 25, 32 and 34 stand or fall with claim 26. We will, however, give independent consideration to claims 20, 25, 32 and 34 for which separate arguments were explicitly made.

We have not overlooked that portion of the Appeal Brief (page 4) which describes the nature of various groups of claims. A mere recitation in a brief of what a claim

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[2] In the Appeal Brief, applicants specifically mention claims 22 and 25. The reference to claim 22, both in the Appeal Brief and the Reply Brief (Paper 15 at page 2), obviously was intended to be a reference to claim 20.

[3] In the Appeal Brief, applicants specifically mention claims 33 and 34. The reference to claim 33, both in the Appeal Brief and the Reply Brief (Paper 15 at page 3), obviously was intended to be a reference to claim 32.

describes is not an argument which specifies "the errors in the rejection" within the meaning of Rule 192 (1994).

Nor have we overlooked the statement in the Reply Brief (page 1) that "[n]o separate consideration of the claim groups has occurred" in the Examiner's Answer. There is a good explanation for the examiner's partially correct statement in the Examiner's Answer (page 2) to the effect that applicants failed "to present reasons in support" of each group set out in the Appeal Brief. It is true that the examiner apparently overlooked applicants' arguments with respect to claims 20, 25, 32 and 34. But, like the board, an examiner should not have to respond to arguments which were never made. Keebler Co. v. Murray Bakery Products, supra.

B. Findings of fact

The record supports the following findings by a preponderance of the evidence.

The claimed subject matter

1. Claim 26 reads as follows (indentation and matter in brackets added):

A lubricating or functional fluid composition, comprising:

[1] a major amount of oil of lubricating viscosity,

(i) a borate ester prepared by reacting

[a] a hydroxy-containing organophosphorus compound, having at least one sulfur atom with

[b] a boron compound, and

(ii) at least one [member selected from the group consisting of]

[a] sulfurized organic composition or

[b] a dithiocarbamate-containing compound.

2. Claims 20 and 25 call for a lubricating or functional fluid composition which is a "gear oil."

3. Claims 32 and 34 call for an aqueous composition comprising water and a minor amount of a borate ester.

4. In the specification, applicants state that a description of "oils of lubricating viscosity" is set out at col. 2, line 37 through col. 3, line 63 of Davis, U.S. Patent 4,582,618 (1986).[4] We have considered that description in Davis. In part, it states:

> The lubricating oil compositions *** contain less than about 0.1% by weight of phosphorus, and more generally less than about 0.08% by weight of phosphorus.
>
> * * * * *

[4] Davis is prior art under 35 U.S.C. § 102(b).

> Unrefined, refined and rerefined oils, either natural or synthetic (as well as mixtures of two or more of any of these) of the type disclosed hereinabove can be used in the compositions of the present invention. Unrefined oils are those obtained directly from a natural or synthetic source without further purification treatment. For example, a shale oil obtained directly from retorting operations, a petroleum oil obtained directly from primary distillation or ester oil obtained directly from an esterification process and used without further treatment would be an unrefined oil. Refined oils are similar to the unrefined oils except they have been further treated in one or more purification steps to improve one or more properties. Many such purification techniques are known to those skilled in the art such as solvent extraction, secondary distillation, acid or base extraction, filtration, percolation, etc. Rerefined oils are obtained by processes similar to those used to obtain refined oils applied to refined oils which have been already used in service. Such rerefined oils are also known as reclaimed or reprocessed oils and often are additionally processed by techniques directed to removal of spent additives and oil breakdown products.

The examiner's rejection

5. The examiner rejected all the claims as being unpatentable under 35 U.S.C. § 103 over Braid, U.S. Patent

3,654,155 (1972)[5] combined with Burjes, U.S. Patent 4,755,311 (1988)[6] (Examiner's Answer, page 2).

Burjes

6. Burjes describes lubricating and functional fluids which contain a borated amine salt of a monothiophosphoric acid. 7. Neither applicants nor the examiner maintain that the borated amine salt of a monothiophosphoric acid described by Burjes is a borate ester prepared by reacting [a] a hydroxy-containing organophosphorus compound, having at least one sulfur atom with [b] a boron compound within the meaning of paragraph (i) of applicants' claim 26.

8. In describing the background to his invention, Burjes tells us (col. 1, line 21-55; emphasis added):

> The problems associated with the lubrication of gears such as utilized in automotive transmission and axles are well known to those skilled in the art. In the lubrication of automatic transmissions, proper fluid viscosity at both low and high temperatures is essential to successful operation. Good low temperature fluidity

[5] Braid is prior art under 35 U.S.C. § 102(b).

[6] Burjes is prior art under 35 U.S.C. § 102(b).

eases cold weather starting and insures that the hydraulic control system will properly "shift gears". High viscosity at elevated temperatures insures pumpability and the satisfactory operation of converters, valves, clutches, gears and bearings. These conflicting fluidity requirements require a product that exhibits the following characteristics:

(a) high temperature viscosity retention,

(b) low temperature fluidity,

(c) shear stability, and

(d) high temperature stability.

In order to prepare lubricants having these characteristics, it has become common practice to add a variety of chemicals to the lubricating oil. For example, in order to meet the viscosity requirements, compositions have been added to the oils which are characterized by relatively small change in their viscosity with changing temperature. In general, lubricants containing such compositions have the desirable properties of functioning immediately, even though cold, upon being put into service, and to continue to function satisfactorily as they become heated during operation. Commonly used gear oil viscosity improvers include polymethacrylates and polyolefins.

In addition to viscosity improvers, lubricating compositions useful as gear lubricants generally will contain pour point depressants, extreme pressure agents,

> oxidation inhibitors, corrosion inhibitors, foam inhibitors, and friction modifiers.

9. Burjes notes that (col. 2, lines 53-60; emphasis added):

> More recently, new demands are being placed on lubricants to be used in gear applications. Increases in commercial vehicle power and loading require the lubricant to be available to withstand severe thermal stressing while protecting the equipment being lubricated. Thus, the high temperature stability (e.g., above about 160EC.) of lubricants designed for gear applications is a significant consideration.

10. Burjes explains his invention as follows (col. 2, lines 63-68):

> This invention is directed to borated amine salts of dihydrocarbyl monothiophosphoric acids, and to lubricating and functional fluid compositions containing said borated amine salts. The lubricating and functional fluid compositions have improved extreme pressure properties and high temperature stability.

11. Describing oils of lubricating viscosity, Burjes describes the following (col. 29, lines 35-52; emphasis added):

> The lubricating and oil-based functional fluid compositions of the present invention are based on diverse oils of lubricating viscosity, including natural and synthetic lubricating oils and mixtures thereof. These lubricating compositions containing the phosphorus-containing and nitrogen-containing compositions of the invention, are effective in a variety of applications including crankcase lubricating oils for spark-ignited and compression-ignited internal combustion engines, including automobile and truck engines, two-cycle engines, aviation piston engines, marine and low-load diesel engines, and the like. Also, automatic transmission fluids, transaxle lubricants, <u>gear lubricants</u>, metal-working lubricants, hydraulic fluids, and other lubricating oil and grease compositions can benefit from the incorporation of the compositions of this invention. The lubricating compositions are particularly effective as <u>gear lubricants</u>.

12. Consistent with his earlier description of additives which can be present in lubricating oils, Burjes continues (col. 45, lines 47-54; emphasis added):

> The invention also contemplates the use of other additives in the lubricating and functional fluid compositions of this invention. Such additives include, for example, detergents and dispersants of the ash-producing or ashless type, <u>corrosion- and oxidation-inhibiting agents</u>, pour point depressing agents, <u>extreme</u>

> pressure agents, antiwear agents, color stabilizers and anti-foam agents.

13. With respect to extreme pressure agents and corrosion- and oxidation-inhibiting agents, Burjes notes the following (col. 47, lines 9-40; emphasis added):

> Auxiliary extreme pressure agents and corrosion- and oxidation-inhibiting agents which may be included in the lubricants and functional fluids of the invention are exemplified by chlorinated aliphatic hydrocarbons such as chlorinated wax; organic sulfides and polysulfides such as benzyl disulfide, bis(chlorobenzyl)disulfide, dibutyl tetrasulfide, sulfurized methyl ester of oleic acid, sulfurized alkylphenol, sulfurized dipentene, and sulfurized terpene;[7] phosphosulfurized hydrocarbons such as the reaction product of a phosphorus sulfide with turpentine or methyl oleate, phosphorus esters including principally dihydrocarbon and trihydrocarbon phosphites such as dibutyl phosphite, diheptyl phosphite, dicyclohexyl phosphite, pentylphenyl phosphite, dipentylphenyl phosphite, tridecyl phosphite, distearyl phosphite, dimethyl naphthyl phosphite, oleyl 4-pentylphenyl phosphite, polypropylene (molecular weight 500)-substituted phenyl phosphite, diisobutylsubstituted phenyl phosphite; metal thiocarbamates, such as zinc

[7] A "sulfurized terpene" falls within the scope of the "sulfurized organic composition" called for by claim 26. See page 14, lines 1-2 of the specification.

> dioctyldithiocarbamate, and barium heptylphenyl dithiocarbamate;[8] Group II metal phosphorodithioates such as zinc dicyclohexylphosphoro-dithioate, zinc dioctylphosphorodithioate, barium di(heptylphenyl)-phosphorodithioate, cadmium dinonylphosphorodithioate, and the zinc salt of a phosphorodithioic acid produced by the reaction of phosphorus pentasulfide with an equimolar mixture of isopropyl alcohol and n-hexyl alcohol.
>
> Many of the above-mentioned auxiliary extreme pressure agents and corrosion-oxidation inhibitors also serve as antiwear agents. Zinc dialkylphosphorodithioates are a well known example.

14. Burjes differs from the subject matter of claim 26 in that it does not describe the presence of the borate ester called for by paragraph (i) of claim 26.

Braid

15. Braid describes borate esters which are made by reacting a hydroxy-containing organophosphorus compound, having at least one sulfur atom with a boron compound. See, e.g., Example 2 wherein boric acid [a boron compound] and O,O-ditolyl-S-(2-hydroxypropyl)phosphorodithioate [a hydroxy-containing organophosporous compound] is refluxed in benzene.

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[8] Zinc dioctyldithiocarbamate and barium heptylphenyl dithiocarbamate are dithiocarbamate containing compounds within the scope of paragraph (ii) of claim 26.

The product is said to be a "borate ester of the reactant phosphorodithioate" (col. 4, lines 19-21).

16. According to Braid, the product of his invention, i.e., the borate esters, may be used in industrial fluids, such as lubricating oils (col. 3, lines 51-52). The lubricating oils may be further compounded by thickeners to produce grease compositions (col. 3, lines 61-63).

17. Lubricating compositions containing the borate esters described by Burjes are said to have "excellent inhibition and antioxidant stability by the additive of this invention" (col. 3, lines 67-69).

18. Braid notes that (col. 2, lines 1-5; emphasis added):

> The products of this invention are esters which are strikingly effective as <u>anti-corrosion agents</u> and <u>antioxidatants</u> in industrial fluids, especially in <u>lubricating oils</u>. These esters are particularly effective in preventing corrosion of copper surfaces.

19. Braid further notes that (col. 5, lines 48-54):

> The products of this invention may be used in lubricating oils, fuels and other industrial compositions, both liquid and solid. These compositions may contain other additives which provide additional

characteristics of performance. From about 0.05% to about 10% by weight of the products may be present in the finished composition.

20. Braid differs from the subject matter of claim 26 in that it does not describe the presence of a sulfurized organic composition or a dithiocarbamate-containing compound as required by paragraph (ii) of claim 26.

C. Discussion

1. Claim 26

We agree with the examiner that the subject matter of claim 26 would have been prima facie obvious in view of the combined teachings of Braid and Burjes.

As noted above, Burjes differs from the subject matter of claim 26 in that it does not describe the presence of the borate ester called for by paragraph (i) of claim 26. Braid, on the other hand, differs from the subject matter of claim 26 in that it does not describe the presence of a sulfurized organic composition or a dithiocarbamate-containing compound as required by paragraph (ii) of claim 26. However, both Braid and Burjes tell us that various additives can be added

to lubricating oils, including lubricating oil which are useful as gear lubricants.

Braid tells us that "other additives" may be added to lubricating oils having the phosphorus compound required by paragraph (i) of claim 26. The reason the "other additives" may be present is to "provide additional characteristics of performance" (col. 5, lines 51-52).

Burjes tells us with more detail why various additives may be present. Including among those various additives, are both corrosion-and oxidation-inhibiting agents and extreme pressure agents (col. 45, lines 51-53).

Whether this appeal is viewed as being one where a person having ordinary skill in the art would add (1) a sulfurized terpene or zinc dioctydithiocarbamate of Burjes to the Braid lubricating composition or (2) the borate ester of Braid to the Burjes lubricating composition, the result is the same. In each instance, the person having ordinary skill in the art would be adding an "additive" to a lubricating oil for its intended purpose. Use of an additive for its intended purpose is generally convincing evidence of non-obviousness. No evidence has been called to our attention which would

establish that the particular combination of additives called for by claim 26 produces any unexpected result.

Applicants maintain (Appeal Brief, page 5) that there is no "motivation" or "teaching" which would lead one having ordinary skill in the art to use the borates of Braid in the Burjes lubricating compositions or use the sulfurized compounds of Burjes in the Braid lubricating compositions. We disagree.

We have found no reason to doubt the objective truth of the statements made in both Braid and Burjes, the latter of which is assigned to the assignee of the application on appeal. The teachings, taken as a whole, provide the necessary suggestion or motivation. In this connection, we note that there is binding precedent which holds that "the test of obviousness is not express suggestion of the claimed invention in any or all of the references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them." In re Rosselet, 347 F.2d 847, 851, 146 USPQ 183, 186 (CCPA 1965). See also In re Keller, 642 F.2d 413, 426, 208 USPQ 871, 882 (CCPA 1981). The references relied upon by the examiner demonstrate that

additives falling within the scope of paragraphs (i) and (ii) of claim 26 are known additives for lubricating oils.

On this record, the subject matter of claim 26 would have been obvious to a person having ordinary skill in the art. Accordingly, the examiner's rejection of claim 26 is affirmed. Since claims 2-9, 11-19, 22-23, 27-30 and 35 stand or fall with claim 26, the examiner's rejection of those claims is likewise affirmed.

2. Claims 20 and 25

Applicants maintain that claims 20 and 25 are separately patentable because "Braid does not teach or suggest gear oils" (Appeal Brief, page 6). However, Braid does teach lubricating oils in general and Burjes tells us that one kind of lubricating oil is gear oil (col. 2, lines 53-60). In fact, Burjes sets out to solve problems which are said to have existed with gear oils.

On this record, we believe one skilled in the art would have found it obvious to use the additives of Burjes and Braid in gear oils. It is true, as applicants state (Appeal Brief, page 6), that Braid describes tests of his borate in a Bearing Corrosion Engine Test. It is also true, however, that Braid

describes his borates as being corrosion-inhibitors and that Burjes describes the addition of corrosion-inhibitors to his lubricating oils, which include gear oils. Hence, one having ordinary skill in the art would have been motivated to use the Braid borate in the lubricating oils of Burjes when corrosion-inhibition would have been desirable, particularly where any surface to be protected against corrosion is copper.

3. Claims 32 and 34

Claims 32 and 34 call for an aqueous composition. Applicants maintain, correctly, that there is nothing in Braid which teaches or suggests the use of the Braid borates in an aqueous solution. We find it curious that the examiner has not responded to applicants' arguments with respect to claims 32 and 34. Since there is no explanation by the examiner as to precisely how Braid and/or Burjes is supposed to render claims 32 and/or 34 unpatentable under 35 U.S.C. § 103, we are left with no choice but to reverse the rejection of claims 32 and 34.

D. Decision

The decision of the examiner rejecting claims 2-9, 11-20, 22-23, 25-30 and 35 is affirmed.

The decision of the examiner rejecting claims 32 and 34 is reversed.

E. Time for taking action

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART and REVERSED-IN-PART

FRED E. McKELVEY, Senior Administrative Patent Judge	
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