

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HORST ZINKE and ROLF SCHUMACHER

Appeal No. 1997-1875
Application No. 08/451,378

ON BRIEF

Before GARRIS, WALTZ, and TIMM, Administrative Patent Judges.
GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 through 13 which are all of the claims in the application.

The subject matter on appeal relates to a compound (as well as a composition containing the compound and a method which includes adding the compound to a fluid) of a certain formula which defines a specified class of bisdithiophosphoric

Appeal No. 1997-1875
Application No. 08/451,378

acid derivatives. These compounds are said to enhance the properties of fluids such as enhancing the wear and friction characteristics of lubricants. The appealed subject matter is adequately illustrated by independent claim 1, a copy of which taken from the appellants' brief is appended to this decision.

The references relied upon by the examiner in the rejections before us are:

Miles	3,784,588	Jan. 8, 1974
Umemoto et al. (Umemoto)	EPA-465,156 A2	Jan. 8, 1992
Miles	GB-1,287,331	Aug. 31, 1972

All of the claims on appeal stand rejected under 35 U.S.C.

§ 102(a) or (b) as being anticipated by or in the alternative under 35 U.S.C. § 103 as being obvious over the British reference to Miles, the U.S. patent to Miles or the European reference to Umemoto.¹

For the reasons set forth below, we will sustain the examiner's § 103 rejection but not the § 102 rejection.

¹The appealed claims will stand or fall together; see page 4 of the brief. Accordingly, in our disposition of this appeal, we will focus upon representative independent claim 1 with which the other appealed claims will stand or fall.

Appeal No. 1997-1875
Application No. 08/451,378

In order for a § 102 rejection to be proper, the reference must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference. In re Arkley, 455 F.2d 586, 587, 172 USPQ 524, 526 (1972). Compare In re Petering, 301 F.2d 676, 681, 133 USPQ 275, 279 (1962). In the case at bar, the only way to derive the here claimed compounds from any of the applied references is via the prohibited exercise of picking, choosing and combining disclosures within the respective references. That is, the appellants' claimed compounds would be obtained from the applied reference teachings only by selecting certain choices for numerous variables within the generic compound formula disclosed in these references.

Under the foregoing circumstances, we cannot regard the applied references as anticipatory of the appealed claims. It follows that the examiner's § 102 rejection of claims 1 through 13 as being anticipated by the British reference to

Appeal No. 1997-1875
Application No. 08/451,378

Miles or the U.S. patent to Miles or the European reference to Umemoto cannot be sustained.

We reach a different conclusion, however, with respect to the examiner's § 103 rejections. Contrary to the appellants' apparent belief, one having an ordinary level of skill in the art would have been motivated to select the particular variables necessary to yield the here claimed compounds because of the generic teachings of the respective references which disclose that all of the compounds embraced thereby are useful as fluid additives (as are the here claimed compounds). The mere fact that these respective references may embrace a large number of compounds does not militate against an obviousness conclusion with respect to each of them. In re Merck, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989).

For these reasons, it is our determination that the reference evidence adduced by the examiner establishes a prima facie case of obviousness within the meaning of 35 U.S.C. § 103. Because the appellants have submitted rebuttal evidence of nonobviousness, we now proceed to retrace our

Appeal No. 1997-1875
Application No. 08/451,378

considerations on the issue of obviousness. In re Rinehart,
531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

As rebuttal evidence, the appellants have submitted under 37 CFR § 1.132 a declaration executed by Dr. Horst Zinke in 1994 and a declaration executed by Dr. Horst Zinke in 1995. Each of these declarations compares the same prior art compound (i.e., the compound of British reference Example 32 and European reference Example 1, which is said to be the closest prior art) with two compounds within the scope of independent claim 1 (i.e., the compound of specification Example 10 in the 1994 declaration and the compound of specification Example 4 in the 1995 declaration). On page 3 of these respective declarations, the inventive compound is said to improve antiwear properties "significantly more" than the prior art compound which is a result said to be "surprising."

This declaration evidence is deficient in a number of respects.

In the first place, the rebuttal evidence is limited to only two of the myriad number of compounds encompassed by appealed independent claim 1 and thus is considerably more

Appeal No. 1997-1875
Application No. 08/451,378

narrow in scope than the here claimed subject matter. It is well established that evidence presented to rebut a prima facie case of obviousness must be commensurate in scope with the claims to which it pertains and that evidence which is considerably more narrow in scope than the claimed subject matter is not sufficient to rebut a prima facie case. In re Dill, 604 F.2d 1356, 1360, 202 USPQ 805, 808 (CCPA 1979). Thus, the appellants' evidence of nonobviousness is deficient in that it does not show the class of compounds defined by their independent claim to be unexpectedly superior as a class to the comparison prior art compounds. In re Susi, 440 F.2d 442, 446, 169 USPQ 423, 426 (CCPA 1971).

The appellants argue "the examiner has not met the burden of presenting objective evidence or sound scientific reasoning to support the conclusion that all of the claimed compounds would not be expected to have a stabilizing effect similar to the [inventive] compounds exemplified in the two Zinke Declarations" (Brief, page 7). It is, however, the appellants' burden to show that their claimed compounds as a class possess the superiority asserted in the declarations. In re Susi, id. Regardless, there is in fact evidence and

Appeal No. 1997-1875
Application No. 08/451,378

reasoning to support the proposition that the improvement reflected by the two inventive compounds in the declarations would not be exhibited by the class of compounds defined by independent claim 1.

For one thing, this class of compounds varies widely in structure. Even focusing only on the linking group R_3 (which the appellants identify as the difference between their claimed compounds and the prior art compounds), it is undeniable that the substituents embraced by this group vary widely in terms of chemical elements and structures (e.g., compare the first and the last two R_3 substituents listed in appealed claim 1). It is reasonable to conclude that the here claimed compounds containing such wide chemical variation would likewise possess widely varying properties and thus would not necessarily exhibit as a class the improvement shown for the two inventive compounds tested in the Zinke declarations.

Furthermore, these declarations reflect that the superior antiwear properties of the inventive compounds in comparison with the compound of the applied prior art amounts to an improvement of approximately 12% (e.g., 0.092 divided by 0.082

Appeal No. 1997-1875
Application No. 08/451,378

per the 1994 declaration equals 1.12). Significantly, Table II on specification page 16 reveals that the antiwear properties for the inventive compound of Example number 4 are superior to those for the inventive compound of Example number 8 by this same approximate amount of 12% (i.e., 0.104 divided by 0.093 equals 1.12). In other words, the antiwear properties of the here claimed compounds appear to vary in comparison with one another to the same extent as in comparison to the prior art compound tested in the Zinke declarations.

This last mentioned circumstance supports the conclusion that, while the antiwear properties of certain here claimed compounds will be superior to those of the tested prior art compound, the antiwear properties of other claimed compounds will correspond to those of the prior art compound. That is, the antiwear properties of these other claimed compounds will be 12% inferior to certain claimed compounds as reflected by specification Table II and thus will correspond to the antiwear property of the tested prior art compound which is shown by the Zinke declarations to be 12% inferior to the tested inventive compounds. For this reason, it is

Appeal No. 1997-1875
Application No. 08/451,378

appropriate to conclude that the here claimed compounds as a class would not exhibit the improvement shown in the Zinke declarations.

In light of the foregoing, it is clear that the appellants' declaration evidence of nonobviousness is considerably more narrow in scope than the appealed claims and thus insufficient to rebut the examiner's reference evidence of obviousness.

This declaration evidence is also deficient in another respect. Specifically, the record before us does not support the conclusion that the antiwear property improvement shown in these declarations would have been unexpected by an artisan with ordinary skill. Certainly, the declarations themselves contain no express statements that the improved results are unexpected. More importantly, the record contains evidence which reflects that these improvements constitute merely typical variations in this art and thus would have been expected rather than unexpected. This last mentioned evidence constitutes the variation in antiwear properties discussed above. By way of reiteration, whether the here claimed compounds are compared to each other or compared to the prior

Appeal No. 1997-1875
Application No. 08/451,378

art, the antiwear properties appear to vary by the same amount, namely, approximately 12%. This fact evinces that a 12% variation in antiwear properties is typical in this art and thus expected rather than unexpected.

In summary, it is our determination that the appellants' evidence of nonobviousness is not commensurate in scope with the claims to which it pertains and fails to show that the improved results would have been unexpected by one having an ordinary level of skill in this art. As a consequence, we consider all of the evidence of record, on balance, to weigh most heavily in favor of an obviousness conclusion. We shall sustain, therefore, the examiner's § 103 rejection of claims 1 through 13 as being unpatentable over the British reference to Miles or the U.S. patent to Miles or the European reference to Umemoto.

The decision of the examiner is affirmed.

Appeal No. 1997-1875
Application No. 08/451,378

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

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
CATHERINE TIMM)	
Administrative Patent Judge)	

lp

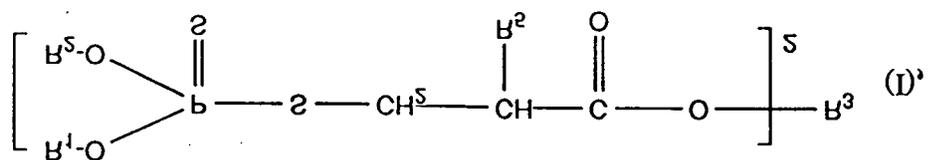
Appeal No. 1997-1875
Application No. 08/451,378

CIBA SPECIALTY CHEMICALS CORP.
PATENT DEPARTMENT
540 WHITE PLAINS ROAD
P.O. BOX 2005
TARRYTOWN, NY 10591-9005

Appeal No. 1997-1875
 Application No. 08/451,378

APPENDIX

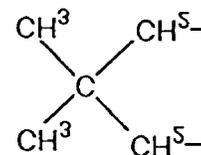
1. A compound of formula



wherein

R₁ and R₂ are each independently of the other C₃-C₁₈ alkyl, C₅-C₁₂ cycloalkyl, C₅-C₆ cycloalkylmethyl, C₉-C₁₀ bicycloalkylmethyl, C₉-C₁₀ tricycloalkylmethyl, phenyl,

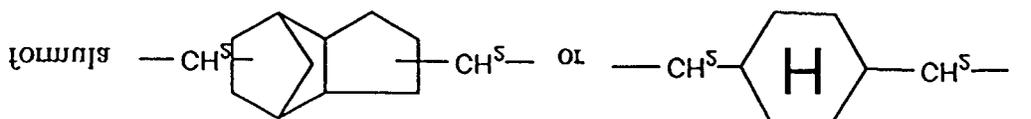
C₇-C₂₄ alkylphenyl or, taken together, are



Appeal No. 1997-1875
 Application No. 08/451,378

R_3 is $(CH_2)_b$

, C_4 - C_{12} alkylene



which
 is
 interr
 upted
 by -O-
 , -S- ,
 or -

NR_4- , is a group of

R_4 is hydrogen, C_1 - C_{18} alkyl, phenyl- C_1 - C_4 alkyl, phenyl or C_1 - C_6
 alkyl-substituted phenyl,
 R_5 is hydrogen or methyl, and
 b is an integer from 4 to 6.

Leticia

Appeal No. 1997-1875
Application No. 08/451,378

APJ GARRIS

APJ WALTZ

APJ TIMM

DECISION:

Send Reference(s): Yes No
or Translation (s)

Panel Change: Yes No

Index Sheet-2901 Rejection(s):

Prepared: May 17, 2002

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT