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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JASON ZHISHENG GAO

Appeal No. 2006-0623
Application 10/181,859 [1]

ON BRIEF

Before PAK, KRATZ, and JEFFREY T. SMITH, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's refusal to allow claims 11 through 14, 16, 17, 19 and 20, which are all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 134.

[1] Application for patent filed November 1, 2002.

APPEALED SUBJECT MATTER

The appellant "elects to have claims 11-14, 16, 17, 19 and 20 treated as a single group." See the Brief, page 4. The appellant does not argue the separate patentability of the individual claims on appeal. See the Brief in its entirety. Thus, for purposes of this appeal, we select claim 11 from all the claims on appeal and decide the propriety of the examiner's Section 103 rejection set forth in the Answer based on this claim alone in accordance with 37 CFR § 41.37(c)(1)(vii)(2004). Claim 11 is reproduced below:

> 11. A method for improving the control of the soot induced viscosity increase of diesel engine lubricant compositions as they age[,] said compositions comprising a major amount of a base stock and a minor amount of a dispersant by incorporating into said diesel engine lubricant compositions an effective amount of an antioxidant combination characterized in that the antioxidant comprises an oil soluble trinuclear organomolybdenum compound of the generic formula:
>
> Mo_3S_x-(Q) (I)
>
> wherein x is from 4 to 10, and Q is a core group, which may be a ligand, and at least one other antioxidant compound selected from an aminic compound.

PRIOR ART

The prior art references relied upon by the examiner in support of the Section 103 rejection before us are:

Fang et al. (Fang)	5,837,657	Nov. 17, 1998

Gao et al. (Gao) 6,734,150 B2 May 11, 2004
(Filed Nov. 12, 2002)

Smalheer et al., Lubricant Additives, The Lezius-Hiles Co., Cleveland, Ohio, pp. 1-11 (1967) (hereinafter referred to as "Smalheer").

REJECTION

Claims 11 through 14, 16, 17, 19 and 20 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Fang and Smalheer. Claims 11 through 14, 16, 17, 19 and 20 under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 8 and 9 of U.S. Patent 6,734,150 B2 issued to Gao on May 11, 2004.

DISCUSSION

We have carefully reviewed the claims, specification and prior art, including all of the evidence and arguments advanced by both the examiner and the appellant in support of their respective positions. This review has led us to conclude that the examiner's Section 103 rejection and obviousness-type double patenting rejection are well founded. Accordingly, we affirm the examiner's Section 103 rejection and obviousness-type double patenting rejection for essentially the factual findings and conclusions set forth in the Answer and below.

The examiner finds (the Answer, page 3), and the appellant does not dispute (the Brief, pages 5-8), that Fang teaches

> a method for improving the performance of a sooted diesel oil and to control soot-induced viscosity increase by adding to a major amount of diesel oil a minor amount of a composition comprising at least one compound of the formula $Mo_3S_kL_nO_z$ and mixtures thereof, wherein the L are independently selected ligands having organo groups with a sufficient number of carbon atoms to render the compound soluble or disperible in the oil, n is from 1 to 4, k varies from 4-10, Q is selected from electron donating compounds and z ranges from 0 to 5. See column 1, lines 5-9 and lines 55-65. Fang teaches that the base oil may be selected from any of the diesel lubricating oils including light diesel to heavy duty diesel oils. The examiner is of the position that the molybdenum compound disclosed in Fang meets the limitations of the claimed compound when z (thus Q) is zero.

Rather, the appellant appears to argue that Fang and Smalheer would not have suggested employing the claimed additional antioxidant, i.e., an aminic compound, in a "method for improving the control of the soot induced viscosity increase of diesel engine lubricant compositions..." See the Brief, pages 5-8. We do not agree.

As indicated supra, Fang teaches "a method for improving the performance of a sooted diesel oil and controlling soot induced viscosity increase and wear by adding to a major amount of a diesel oil [base stock] a minor amount of a composition comprising [the claimed oil soluble and dispersible trinuclear organomolybdenum compound]". See also column 1, line 55 to

column 2, line 3 and column 4, line 61 to column 5, line 27. As also correctly found by the examiner (the Answer, page 3),

> Fang teaches that other known lubricant additives may be compatible with the invention and can be present in the diesel oil being treated. These additives include dispersants and antioxidants. See column 5, lines 62-67.

Although Fang does not mention specific antioxidants, the examiner correctly finds that Smalheer teaches that "phenolic and amine antioxidants are well-known in the lubricant art." See the Answer, page 3, together with Smalheer, page 7. Specifically, Smalheer teaches that some of these phenolic and amine antioxidants are considered "those older products which have stood the test of time and competition in the additive industry." See page 7.

Given the above teachings, we concur with the examiner that one of ordinary skill in the art would have been led to add the proven antioxidant additive taught by Smalheer in the lubricant composition used in Fang's method, motivated by a reasonable expectation of successfully inhibiting the oxidation of the lubricant composition. Thus, we determine that the examiner has established a prima facie case of obviousness regarding the claimed subject matter within the meaning of 35 U.S.C. 103.

As a rebuttal to the prima facie case established by the examiner, the appellant argues that "an aminic antioxidant in addition to a trinuclear molybdenum compound to an oil formulation containing a dispersant will result in an unexpectedly greater degree of control of such soot induced viscosity increase as compared to the addition of a phenolic antioxidant in addition to a trinuclear molybdenum composition to the same oil formulation (emphasis original)." See the Brief, pages 6-7. In support of this argument, the appellant refers to the relative viscosities of test oils formulations O, P, M and N tabulated in Tables 4, 5 and 6 at pages 10 through 12 of the specification. Id. Tables 4, 5 and 6 show that the employment of either oxtylated/butylated diphenylamine or an alkylated phenyl-alpha-naphthylamine, as opposed to "a high molecular weight phenolic antioxidant" in the exemplified test oil formulations imparts an improved relative viscosities from 1.20 to 1.19 and from 1.30 to 1.26 or 1.24, respectively. Having reviewed the showing in the specification, we determine that the appellant has not demonstrated that the claimed subject matter as a whole imparts unexpected results. In re Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972)(The appellant has the burden of

showing that the claimed subject matter imparts unexpected results.); In re Heyna, 360 F.2d 222, 228, 149 USPQ 692, 697 (CCPA 1966)("It was incumbent upon appellants to submit clear and convincing evidence to support their allegation of unexpected property.").

First, as correctly pointed out by the examiner (the Answer, page 12), the appellant has not demonstrated that the showing in the specification is commensurate in scope with the degree of protection sought by the claims on appeal. See In re Kulling, 897 F.2d 1147, 1149-50, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990); In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983); In re Clemens, 622 F.2d 1029, 1035-36, 206 USPQ 289, 295-96 (CCPA 1980). The appellant has not evinced that the vast number of aminic compounds recited in the claims on appeal would behave in the same manner as the two specific aminic compounds containing phenyl and amine used in test oil formulations. In other words, the appellant fails to show that the data relied upon are indicative of the relative viscosities which would be obtained when the materially different aminic compounds covered by the claims on appeal are employed.

Second, as again pointed out by the examiner (Answer, page 5), the appellant has not demonstrated the alleged improvements

resulting from employing either oxtylated/butylated diphenylamine or an alkylated phenyl-alpha-naphthylamine in test oil formulations are unexpected. In re Freeman, 474 F.2d 1318, 1324, 177 USPQ 139, 143 (CCPA 1973); Klosak, 455 F.2d at 1080, 173 USPQ at 16. The appellant has not evinced that the alleged improvements are not within the margin of error in the tests employed in the specification. Indeed, nowhere does the appellant aver that the alleged improvements are unexpected by one of ordinary skill in the art. In re Geisler, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997). The only allegation of unexpected results is from the appellant's counsel. Thus, it cannot be said that the appellant has carried the burden of showing that the claimed subject matter as a whole imparts unexpected results, thereby rebutting the prima facie case established by the examiner.

Based on the totality of record, including due consideration of the appellant's arguments and evidence, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of Section 103(a). Accordingly, we affirm the examiner's decision rejecting claims 11 through 14, 16, 17, 19 and 20 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Fang and Smalheer.

With respect to the obviousness-type double patenting rejection, the appellant states (the Brief, page 8) that:

> The Examiner's rejection of the claims under the judicially created doctrine of obviousness-type double patenting over method claims 8 and 9 of USP 6,734,150 is no longer contested.

Thus, we summarily affirm the examiner's decision rejecting claims 11 through 14, 16, 17, 19 and 20 under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 8 and 9 of U.S. Patent 6,734,150 B2 issued to Gao on May 11, 2004.

CONCLUSION

In view of the foregoing, the decision of the examiner is affirmed.

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

AFFIRMED

CHUNG K. PAK Administrative Patent Judge	)	
PETER F. KRATZ Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY T. SMITH Administrative Patent Judge	)	

CKP/TF

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EXXONMOBIL RESEARCH AND
ENGINEERING COMPANY
P.O. BOX 900
1545 ROUTE 22 EAST
ANNANDALE, NJ 08801-0900