

1 The opinion in support of the decision being entered today was *not* written
2 for publication and is *not* binding precedent of the Board
3

4 UNITED STATES PATENT AND TRADEMARK OFFICE
5

6
7 BEFORE THE BOARD OF PATENT APPEALS
8 AND INTERFERENCES
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11 *Ex parte* DAVID E. CHASAN and SUNRAY DiFRANCESCO
12

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14 Appeal 2007-0691
15 Application 10/465,423
16 Technology Center 1700
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20 Decided: June 20, 2007
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23 Before FRED E. McKELVEY, *Senior Administrative Patent Judge*,
24 and TEDDY S. GRON and SALLY C. MEDLEY, *Administrative Patent*
25 *Judges*.

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27 McKELVEY, *Senior Administrative Patent Judge*.

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29 DECISION ON APPEAL
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31 **A. Statement of the case**

32 This *ex parte* appeal under 35 U.S.C. § 134(a) is from a rejection of
33 claims 1, 4-8 and 11-12, the only claims remaining in the application on
34 appeal.

35 We have jurisdiction under 35 U.S.C. § 6(b).

1 The application on appeal was filed on 19 June 2003 and was
2 published as 2004/00338835 A1 on 26 February 2004. Since the pages of
3 the specification in the PTO's IFW (image file wrapper) are not numbered,
4 reference to the specification in this opinion will be to the specification as
5 published.

6 Appellants (hereafter **Ciba**) claim benefit of an earlier filing date
7 based on Provisional Application 60/401,299, filed 06 August 2002.

8 The real party in interest is Ciba Specialty Chemicals.

9 The Examiner rejected all of the claims under 35 U.S.C. § 103(a) as
10 being unpatentable over any one of (1) Phillips, (2) Chasan, or (3) Reyer-
11 Gavilan. (The reader should know that no references to *et al.* are made in
12 this opinion.)

13 The following prior art was relied upon by the Examiner.

14

15	<u>Name</u>	<u>Patent Number</u>	<u>Issue Date</u>
16	Phillips	US 4,734,209	29 Mar 1988
17	Chasan	US 5,580,482	03 Dec 1996
18	Reyes-Gavilan	US 6,410,490 B1	25 Jun 2002

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20 Phillips and Chasan are prior art under 35 U.S.C. § 102(b).

21 Reyes-Gavilan is prior art under 35 U.S.C. § 102(e) having been filed
22 on 18 May 2000, which is prior to Ciba's earliest possible filing date of
23 06 August 2002 and under 35 U.S.C. § 102(a) having issued less than one
24 year prior to Ciba's filing date of 19 June 2003.

25 In this appeal, Ciba has not attempted to antedate Reyes-Gavilan.
26 Accordingly, for the purpose of this appeal, Reyes-Gavilan is prior art.

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B. Record on appeal

In deciding this appeal, we have considered *only* the following documents:

1. Specification, including original claims, as published in U.S. Published Application 2004/00338835 A1 (26 February 2004)
2. Final Rejection entered 06 December 2005
3. The Appeal Brief filed 08 June 2006
4. Chasan declaration filed 08 June 2006
5. The Examiner's Answer entered 17 August 2006
6. Phillips
7. Chasan
8. Reyes-Gavilan
9. Chasan declaration filed 08 June 2006
10. PTO bibliographic data sheet for the application on appeal
11. Claims on appeal as reproduced in the Appeal Brief

C. Issues

There are several issues.
A first issue is the scope of the claims on appeal.
A second issue is whether Ciba has shown that the Examiner erred in rejecting the claims on appeal as being unpatentable under 35 U.S.C. § 103(a) over the prior art.
Related to the second issue, is whether Ciba has supplied a clear and convincing showing of unexpected results.

1 [American Petroleum Institute] categories CF-4 and CG-4 by ASTM D 5968
2 and 120 ppm for category CH-4 by ASTM D 6594 [¶ 0006].

3 Various components of formulated engine oils cause lead corrosion
4 [¶ 0007].

5 For example, desired additive chemistries that are aggressive towards
6 lead and are otherwise disqualified from use in engine oils include sulfur-
7 containing additives [¶¶ 0008 and 0132].

8 The engine oils useful in the invention include diesel and universal
9 oils [¶ 0011].

10 Universal oils encompass both diesel oils and passenger car oils
11 [¶ 0011].

12 The engine oils are employed in internal combustion engines, for
13 example, in motor vehicles fitted with engines of the Otto, Diesel, two-
14 stroke Wankel or orbital type [¶ 0011].

15 The engine oils comprise (a) a base fluid [¶ 0014], (b) a triazole
16 [¶ 0015] and (3) an additive that is aggressive towards lead [¶ 0017].

17 A suitable triazole is 1-(di-(2-ethylhexyl)aminomethyl)-1,2,4-triazole.

18 Example 1 in the specification is said to show the advantages of the
19 invention [¶¶ 0144 and 0145].

20 For the purpose of deciding the appeal, we will assume that the
21 procedure in Example 1 was actually carried out and that the results reported
22 were actually obtained.

23 A "fully formulated non-corrosive engine oil" is used as the base
24 formulation, to which is added 1.0 weight % glycerol monooleate (GMO) or

1 0.5 weight % of a sulfur-containing anti wear/extreme pressure additive
2 ditenonly-trisulfide (TSP® 27).

3 To samples of (1) the base formulation, (2) the base formulation
4 with GMO and (3) the base formulation with TSP 27) there was added Ciba
5 product Ingamet® 30, viz., 1-(di-(2-ethylhexyl)aminomethyl)-1,2,4-triazole.

6 The base formulation without Ingamet 30 (or GMO or TSO) had a
7 lead content of 75 ppm.

8 The base formulation with GMO and without Ingamet 30 had a lead
9 content of 358 ppm.

10 The base formulation with GMO and Ingamet 30 had a lead content of
11 29 ppm.

12 The base formulation with TSP and without Ingamet 30 had a lead
13 content of 117 ppm.

14 The base formulation with TSP and Ingamet 30 had a lead content of
15 45 ppm.

16 We are told that the base formulations with GMO or TSP, but without
17 Ingamet 30 are unsuitable for use [¶ 0146].

18 We are also told that the base formulations with Ingamet 30 and either
19 GMO and TSP have lead levels which are "very acceptable levels" [¶ 0146].

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Claims on appeal

22 Claim 1 is representative of the composition claims on appeal.

23 Claim 1 reads [matter in brackets added]:

24 An engine oil composition which comprises:

25 (a) a base fluid,

26 (b) 1-(di-(2-ethylhexyl)aminomethyl)-1,2,4-triazole,

1 The Examiner's Answer discusses the other two prior art patents, viz.,
2 Phillips and Reyes-Gavilan.

3 The Examiner found that Chasan describes lubricant compositions
4 which are stabilized against deleterious effects of heat and oxygen.
5 Answer 4; col. 1:3-4.

6 The lubricant compositions, like those of Ciba, may be used in two-
7 stroke engines. Col. 1:13; Ciba Published Application 1 [¶ 0011].

8 The Examiner further found that the lubricant is made from (1) an oil,
9 (2) a triazole derivative, and (3) a succinic acid derivative. Answer 4; col.
10 2:19 through col. 3:15.

11 The formula of the triazole is shown as Formula I. Col. 2:35.

12 R₁ and R₂ in the formula may be hydrogen or C₁-C₁₀ alkyl, the latter
13 including 2-ethylhexyl. Answer 4; col. 2:40-41.

14 The most preferred triazole is 1-(bis-(2-ethylhexyl)aminomethyl)-
15 1,2,4-triazole, which is the same as 1-(di-(2-ethylhexyl)aminomethyl)-1,2,4-
16 triazole (the bis and the di meaning the same thing). The triazole is sold by
17 Ciba as IRGAMET® 30. Col. 4:60-65. Thus, Chasan describes as its
18 preferred triazole the triazole of the claims on appeal.

19 The Examiner still further found that Chasan teaches that various
20 other additives can be added to the Chasan lubricant composition.
21 Answer 4; col. 6:12 through 9:5.

22 The Examiner notes that Chasan teaches the use of sulphurized
23 vegetable oils as a sulfur-containing anti-wear and extreme pressure
24 additive. Answer 4; col. 8:66 through col. 9:5, with sulphurized vegetable

1 oils being described at col. 9:2. Likewise, Ciba describes the use of
2 sulphurized vegetable oil. Published Application 4 [¶ 0097].

3 Based on her analysis of Chasan, the Examiner found that Chasan
4 describes lubricants which can contain all the ingredients called for by the
5 Ciba claims on appeal. Answer 4.

6 The Examiner's findings are more than adequately supported by
7 Chasan.

8 Chasan Declaration

9 In response to the Examiner's prior art rejection, Ciba submitted a
10 declaration of Dr. David E. Chasan (one of the named inventors in the
11 application on appeal). "Declaration under Rule 132," filed 08 June 2006.

12 The declaration describes experiments which are said to be "an
13 extension of those in Example 1" of the specification. Declaration 1, fourth
14 paragraph.

15 The experiments were designed to compare the lead reducing
16 characteristics of the use of (1) IRGAMET 30, which is the triazole set out
17 in the claims on appeal and the preferred triazole described in the Chasan
18 patent, versus IRGAMET 39, which is another triazole described in the
19 Chasan patent (col. 4:60-65).

20 According to the experiments, the following results are said to have
21 been obtained.

22 A base formulation (a non-corrosive engine oil) with no metal
23 deactivator resulted in a lead content of 75 ppm.

24 A base formulation with only TPS® 27 [diternonlytrisulfide] and no
25 IRGAMET produced 117 ppm of lead.

1 A base formulation with (1) TPS 27 and (2) IRGAMET 30 produced
2 43 ppm of lead.

3 A base formulation with (1) TPS 27 and (2) IRGAMET 39 produced
4 269 ppm of lead.

5 In a light most favorable to Ciba, the results show that the use of
6 IRGAMET 30 along with TPS produces the lowest lead level for the
7 particular oil used in the experiments.

8 According to Chasan, the results are surprising. Declaration 2, last
9 paragraph.

10

11 **E. Principles of law**

12 A claimed invention is not patentable if the subject matter of the
13 claimed invention would have been obvious to a person having ordinary skill
14 in the art. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct.
15 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co. of Kansas City*,
16 383 U.S. 1 (1966).

17 Facts relevant to a determination of obviousness include (1) the scope
18 and content of the prior art, (2) any differences between the claimed
19 invention and the prior art, (3) the level of skill in the art and (4) any
20 relevant objective evidence of obviousness or non-obviousness. *KSR*,
21 82 USPQ2d at 1389, *Graham*, 383 U.S. at 17-18.

22 A person having ordinary skill in the art uses known elements and
23 process steps for their intended purpose. *Anderson's-Black Rock, Inc. v.*
24 *Pavement Salvage Co.*, 396 U.S. 57 (1969) (radiant-heat burner used for its
25 intended purpose in combination with a spreader and a tamper and screed);
26 *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282 (1976). (the involved patent

1 simply arranges old elements with each performing the same function it had
2 been known to perform); *Dunbar v. Myers*, 4 Otto (94 U.S.) 187, 195 (1876)
3 (ordinary mechanics know how to use bolts, rivets and screws and it is
4 obvious that any one knowing how to use such devices would know how to
5 arrange a deflecting plate at one side of a circular saw which had such a
6 device properly arranged on the other side).

7 An inventor must show that the results the inventor says the inventor
8 achieves with the invention are actually obtained with the invention and it is
9 not enough to show results are obtained which differ from those obtained in
10 the prior art—any difference must be shown to be an unexpected difference.
11 *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). *See*
12 *also In re Geisler*, 116 F.3d 1465, 1469-70, 43 USPQ2d 1362, 1365 (Fed.
13 Cir. 1997) (party asserting unexpected results has the burden of proving that
14 the results are unexpected).

15 A showing of unexpected results generally must be commensurate in
16 scope with the breadth of the claimed invention. *In re Greenfield*, 571 F.2d
17 1185, 1189, 197 USPQ 227, 230 (CCPA 1978). *See also In re Harris*, 409
18 F.3d 1339, 1344, 74 USPQ2d 1951, 1955 (Fed. Cir. 2005).

19

20 **F. Discussion**

21 An appeal is decided on the basis of the arguments presented by an
22 appellant—in this case arguments presented by Ciba in its Appeal Brief.

23 In it's Appeal Brief, Ciba acknowledges that the Examiner cited
24 Chasan as disclosing oil that comprises triazole derivatives. Appeal Brief 4.

25 Ciba goes on to say that is "respectfully disagrees." Appeal Brief 4.

1 and (c). In addition, Ciba attempts to limit the definition of (a) and (c) by
2 specifying that a lubricant comprising components (a) and (c), but without
3 component (b), produces a lead content which exceeds 100 ppm when
4 measured according to ASTM D 6594. The claim makes no attempt to
5 define the lead content of a lubricant comprising components (a), (b) and (c)
6 when measured according to ASTM D 6594. The claim reads on
7 compositions where the lead content of the claimed composition with
8 component (b) present could exceed the lead content when component (b) is
9 not present when measured according to ASTM D 6594.

10 Method claim 12 is similar. The only method step recited in claim 12
11 is "incorporating" into a composition comprising (a) and (c) a further
12 component (b). At no point in the claimed process is there a requirement
13 that the composition comprising components (a), (b) and (c) come into
14 contact with lead. It is difficult to see how a method of preventing corrosion
15 can take place by merely adding component (b) to a mixture of components
16 (a) and (c) and there is no contact with any lead source required.

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Weight to be given the experimental data

19 The Examiner declined to give the experimental data much weight
20 finding that it is not commensurate in scope with the breadth of the claims.
21 Answer 5.

22 The Examiner expressed a concern that a showing based on one
23 triazole and one sulfur-containing compound does not justify a finding that
24 the same triazole would achieve the lead-lowering properties with other
25 sulfur-containing compounds. Answer 5. In other words, the Examiner
26 raised the reasonable question of whether lead-lowering properties are solely

1 a function of the triazole or are instead a function of the triazole and the
2 sulfur-containing compound.

3 In his declaration, Dr. Chasan testifies that the results he says he
4 obtained are "surprising." However, Dr. Chasan's "surprising" statement is
5 not a cogent response to the Examiner's concerns. In this respect, we note
6 that Ciba has not filed a reply to the Examiner's Answer.¹ It is not clear on
7 what underlying basis Dr. Chasan says that the experimental data provides a
8 sufficient scientific basis for finding that Ciba's favored triazole will perform
9 a similar lead-reducing result with a representative number of the sulfur-
10 containing compounds falling within the Markush group of sulfur-containing
11 compounds set out in claims 1 and 12. The Examiner was not obligated to
12 accept Ciba's unsupported assertions of Ciba's expert witness. *Rohm and*
13 *Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092, 44 USPQ2d 1459, 1462
14 (Fed. Cir. 1997) (nothing in Federal Circuit jurisprudence requires the fact
15 finder to credit the unsupported assertions of an expert witness). We decline
16 to second-guess the weight the Examiner assigned to the experimental data.

17 The Examiner found that "it is not clear if the results presented are
18 indeed unexpected." Answer 6. The Examiner's finding is supported on this
19 record given that the claims on appeal do not limit the compositions and
20 methods to those which reduce lead-containing levels. As noted above, the
21 claims only define the lead levels of compositions containing components

¹ To the extent that in some paper before the Examiner Ciba presented an argument responding to the Examiner's concerns, no such argument is presented in the Appeal Brief. The only arguments we consider on appeal are those made in the Appeal Brief. 37 C.F.R. § 41.37(c)(1)(vii) (2006). All other arguments which could have been made, but were not made, are waived.

1 (a) and (c). Also we find it difficult to overlook the fact that while Chasan
2 describes a "genus" of triazoles, Chasan identifies only two triazoles as
3 being preferred. Col. 4:60-65. We entertain no doubt that a person skilled
4 in the art, given the disclosure in Chasan, would have (1) known how to test
5 at least each of the two triazoles for metal-reducing characteristics, and
6 (2) would have expected one to be better than the other. That Ciba's favored
7 and claimed IRGAMET 30 triazole turned out to be that triazole is not
8 surprising.

9 Ciba has not met its burden, with clear and convincing evidence, of
10 establishing unexpected results commensurate in scope with the breadth of
11 the claims.

12
13 Ciba's principal argument

14 Ciba's principal argument seems to be that none of the prior art
15 references "mention lead passivation, but rather only iron and copper
16 passivation." Appeal Brief 4. As pointed out previously, the claims on
17 appeal do not require any particular level of lead passivation. More to the
18 point is that one skilled in the art learns from Chasan that various
19 ingredients, including base fluids, triazoles and other ingredients can be used
20 to make a lubricant for a two-stroke engine. One skilled in the art uses
21 known elements to perform known functions even if those functions are to
22 obtain metal-reducing characteristics other than lead-reducing
23 characteristics. *Anderson's-Black Rock, Inc. v. Pavement Salvage Co., Inc.*,
24 396 U.S. 57, 59 (1969). That Ciba's focus was on one problem and the prior
25 art was addressing another problem is not dispositive, particularly where the
26 claims do not limit the alleged invention to the unexpected result said to be

1 achieved. See *KSR*, 127 S. Ct. at ____, 82 USPQ2d at 1396; *In re Dillon*,
2 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990) (en banc); *In re Kemps*,
3 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996). We agree on
4 this record with the Examiner's observation that the claimed compositions
5 and methods are within the public domain in the § 103 sense and that
6 nothing on this record justifies removing the claimed subject matter from the
7 public domain. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S.
8 141, 146 (1989); *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966). In this
9 case, the Examiner has properly performed "[t]he primary responsibility [of
10 the Patent Office] for sifting out unpatentable material ..." *Graham*, 383
11 U.S. at 18.

12

13 **G. Conclusions of law**

14 Ciba has not sustained its burden on appeal of showing that the
15 Examiner erred in rejecting the claims on appeal as being unpatentable under
16 35 U.S.C. § 103(a) over the prior art.

17 On the record before us, Ciba is not entitled to a patent containing the
18 composition and method claims on appeal.

19

20 **H. Decision**

21 ORDERED that the decision of the Examiner rejecting
22 claims 1, 4-8 and 11-12 over the prior art is *affirmed*.

23 FURTHER ORDERED that no time period for taking any
24 subsequent action in connection with this appeal may be extended under
25 37 C.F.R. § 1.136(a)(1)(iv) (2006).

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Appeal 2007-0691
Application 10/465,423

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AFFIRMED

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3 Gron, *Administrative Patent Judge*, concurs in the result only.

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5 lp

Appeal 2007-0691
Application 10/465,423

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