

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KEVIN W. SMITH and EDGAR S. HAFFNER

Appeal No. 1999-0348
Application No. 08/663,471¹

ON BRIEF

Before MEISTER, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 and 3 through 29, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

¹ Application for patent filed June 13, 1996.

BACKGROUND

The appellants' invention relates to an electrically heated insecticide delivery system. An understanding of the invention can be derived from a reading of exemplary claims 1, 12 and 19, which appear in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Laibow 1952	2,616,024	Oct. 28,
Melanson et al. 1987 (Melanson)	4,687,904	Aug. 18,
Zeitoun	556,003 (Belgium)	Apr. 15, 1957

Claims 1, 5 to 7, 10, 11, 14 and 27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Laibow.

Claims 3, 4, 8 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Laibow in view of Melanson.

Claims 12, 13, 19 to 26, 28 and 29 stand rejected under 35 U.S.C. § 103 as being unpatentable over Laibow.

Claims 15 to 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Laibow in view of Zeitoun.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the first Office action (Paper No. 2, mailed April 2, 1997) and the examiner's answer (Paper No. 12, mailed August 18, 1998) for the examiner's complete reasoning in support of the rejections, and to the appellants' brief (Paper No. 11, filed June 1, 1998) and reply brief (Paper No. 13, filed October 19, 1998) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the

examiner. As a consequence of our review, we make the determinations which follow.

In the brief (p. 4), the appellants stated that

Claims 1, 3-11 and 27-29 stand or fall together; Claims 12-13 stand or fall together; Claims 14-18 stand or fall together; and Claims 19-26 stand or fall together.

In accordance with the appellants grouping of claims and arguments provided, we need to review only the rejections of claims 1, 12, 14 and 19 to decide the appeal on the rejections set forth above.

Claim 1

The examiner determined that claim 1 was anticipated by Laibow. The examiner found (first Office action, p. 2) that Laibow shows

a chemical delivery system with a can, a thermally activated chemical (not shown) an electrical heater assembly 19 with a resistance wire heater 22 and a thermal cut-off device 23.

The appellants argue (brief, pp. 4-7) that while Laibow does disclose thermostat-unit 23 which cuts off current when a

predetermined temperature is reached, Laibow does not disclose an additional separate secondary thermal cut-off device as recited in claim 1.

The examiner responded to the appellants argument (answer, pp. 3-4) by asserting that Laibow's resistance heater wire inherently will act as a thermal shut-off when it melts.

The appellants responded (reply brief, pp. 1-2) to the effect that while Laibow's resistance wire of course will melt at some temperature, this does not make it a thermal cut-off. In this regard, the appellants cite the definition of "thermal cut-off" as being a device that "automatically opens the circuit of an electric motor or other device when the operating temperature exceeds a safe valve."

Initially we note that anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of inherent properties that may be possessed by the prior art reference. See Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 633,

2 USPQ2d 1051, 1054 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject of a claim when the reference discloses every feature of the claimed invention, either explicitly or inherently (see Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997) and RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984)); however, the law of anticipation does not require that the reference teach what the appellants are claiming, but only that the claims on appeal "read on" something disclosed in the reference (see Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984)).

Claim 1 recites a chemical delivery system comprising, inter alia, a can, a thermally activated chemical, and an electrical heater assembly. Claim 1 further recites that the electrical heater assembly includes a resistance heater wire connected with a primary thermal cut-off device and that the resistance heater wire be comprised of a material "having a melting temperature defining a secondary thermal cut-off."

Thus, the sole issue presented by the appellants in this appeal is whether the claimed limitation that the resistance heater wire be comprised of a material having a melting temperature defining a secondary thermal cut-off inherently "reads on" Laibow's electrical resistance wiring (see column 3, lines 20-37).

It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Upon review of the appellants' specification, we have determined the following. First, the temperature at which the

primary thermal cut-off device 38 is designed to operate is dependent upon the activation temperature of the thermally activated chemical, which as disclosed is approximately 275°C for permethrin (the only disclosed thermally activated chemical). Second, the only disclosed material for the resistance heater wire is nickel-chromium which has a melting temperature of approximately 1395°C.

It is our determination that the claimed limitation that the resistance heater wire be comprised of a material having a melting temperature defining a secondary thermal cut-off inherently "reads on" Laibow's electrical resistance wiring for the reasons that follow. Accordingly, we sustain the examiner's rejection of claim 1. While the exact material and its melting temperature of Laibow's electrical resistance wiring has not been specifically disclosed, it is our opinion that it is inherent that Laibow's electrical resistance wiring has a melting temperature, and thus, ipso facto, defines a temperature that will function as a thermal cut-off secondary to his thermostat-unit 23. While this temperature may be substantially higher than the activation temperature of the

thermostat-unit 23 (i.e., primary cut-off), this is equally true of the appellants' device wherein the melting temperature of 1395°C of the resistance heater wire is substantially higher than the activation temperature of the primary cut-off (i.e., about 275°C). In addition, it is our view that an artisan in applying the appellants submitted definition of "thermal cut-off" to their device would determine the safe value temperature to be somewhat higher than the activation temperature of the thermally activated chemical (i.e., approximately 275°C for permethrin) and the activation temperature of the primary thermal cut-off. Therefore, the melting temperature of 1395°C disclosed by the appellants for the resistance heater wire functions as a thermal cut-off since 1395°C **exceeds** the safe value temperature (i.e., somewhat higher than 275°C). In the same fashion, it is apparent that the melting temperature of Laibow's electrical resistance wiring would **exceed** the safe value temperature of Laibow's electrical heater assembly (i.e., a temperature slightly higher than the activation temperature of the

thermally activated chemical and the activation temperature of the thermostat-unit 23).

For the reasons stated above, the decision of the examiner to reject claim 1 under 35 U.S.C. § 102(b) is affirmed.

Claims 3 to 11 and 27 to 29

As set forth previously, the appellants have grouped claims 1, 3 to 11 and 27 to 29 as standing or falling together. Thereby, in view of the affirmance of the rejection of claim 1 above, claims 3 to 11 and 27 to 29 fall with claim 1. Thus, it follows that the decision of the examiner to reject claims 5 to 7, 10, 11 and 27 under 35 U.S.C. § 102(b) and claims 3, 4, 8, 9, 28 and 29 under 35 U.S.C. § 103 is also affirmed.

Claim 14

Claim 14 reads as follows:

The chemical delivery system of claim 1, manufactured by the process of overmolding said electrical heater assembly.

The appellants argue (brief, pp. 8-9, and reply brief, p. 3) that Laibow does not disclose or suggest an electrical heater assembly manufactured by the process of overmolding.

The examiner's position (answer, p. 4) is that "Laibow shows all the structure recited."

In our view, the overmolding of the electrical heater assembly step recited in claim 14 defines a structural limitation (i.e., that the electrical heater assembly is overmolded) not disclosed by Laibow. Since all the limitations of claim 14 are not disclosed by Laibow, the decision of the examiner to reject claim 14 under 35 U.S.C. § 102(b) is reversed.

Claims 15 to 18

Claims 15 to 18 depend from claim 14 and were rejected under 35 U.S.C. § 103 as being unpatentable over Laibow in view of Zeitoun. We will not sustain this rejection.

We have reviewed Zeitoun additionally applied in this rejection of claims 15 to 18 but find nothing therein which makes up for the deficiencies of Laibow discussed above regarding claim 14. Accordingly, the decision of the examiner to reject claims 15 to 18 under 35 U.S.C. § 103 is reversed.

Claim 12

Claim 12 recites a chemical delivery system comprising, inter alia, a can, a thermally activated chemical, an electrical heater assembly, and a thermally rupturable seal closing an open end of the can. Claim 12 further recites that the electrical heater assembly includes a resistance heater wire connected with a primary thermal cut-off device.

The examiner determined that claim 12 was obvious over Laibow. The examiner found (first Office action, p. 3) that Laibow does not disclose "a thermal seal closing the open end of the can." The examiner then concluded that "it would have been obvious to provide a seal to retain the thermally activated chemical in the can while handling and during transport."

The appellants argue (brief, pp. 15-17) that the prior art (i.e., Laibow) fails to disclose or suggest a thermally rupturable seal closing an open end of a can.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). The conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

The applied prior art (i.e., Laibow) fails to disclose or suggest a thermally rupturable seal closing an open end of a can. While it may have been obvious to one of ordinary skill in the art at the time the invention was made² to have provided a lid, closure or seal to retain the thermally activated chemical in Laibow's cup 29 prior to its use in his vaporizer, we see no evidence, absent the use of impermissible hindsight, as to why it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a thermally rupturable seal to close the open end of Laibow's cup 29 prior to its use in his vaporizer. Accordingly, the decision of the examiner to reject claim 12 under 35 U.S.C. § 103 is reversed.

Claim 19

² An artisan is presumed to know something about the art apart from what the references disclose (see In re Jacoby, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962)) and the conclusion of obviousness may be made from "common knowledge and common sense" of the person of ordinary skill in the art (see In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)).

Claim 19 recites a chemical delivery system comprising, inter alia, a can, a thermally activated chemical, and an electrical heater assembly. Claim 19 further recites that the electrical heater assembly includes a resistance heater wire having a parallel shunt at one end thereof which bypasses a portion of the heater wire.

The examiner determined that claim 19 was obvious over Laibow. The examiner found (first Office action, p. 3) that Laibow does not disclose "a parallel shunt." The examiner then concluded that "it would have been obvious to employ a parallel shunt such as, for example, to operate a single light to display that the heating element is operational."

The appellants argue (brief, pp. 17-18) that the claimed parallel shunt (i.e., a resistance heater wire having a parallel shunt at one end thereof which bypasses a portion of the heater wire) is not taught, disclosed nor suggested by Laibow, or any of the other cited references.

The applied prior art (i.e., Laibow) fails to disclose or suggest a resistance heater wire having a parallel shunt at one end thereof which bypasses a portion of the heater wire. Once again, the examiner has not applied any evidence³, absent the use of impermissible hindsight, as to why it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a parallel shunt as recited in claim 19. Accordingly, the decision of the examiner to reject claim 19 under 35 U.S.C. § 103 is reversed.

³ Evidence of a suggestion, teaching, or motivation to modify a reference may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), Para-Ordinance Mfg. v. SGS Imports Intern., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), although "the suggestion more often comes from the teachings of the pertinent references," In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). The range of sources available, however, does not diminish the requirement for actual evidence. See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). A broad conclusory statement regarding the obviousness of modifying a reference, standing alone, is not "evidence." E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993); In re Sichert, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977).

Claims 13 and 20 to 26

Claim 13 depends from claim 12 and claims 20 to 26 depend from claim 19. The decision of the examiner to reject claims 13 and 20 to 26 under 35 U.S.C. § 103 is reversed for the reasons set forth above with respect to claims 12 and 19.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 5 to 7, 10, 11 and 27 under 35 U.S.C. § 102(b) is affirmed; the decision of the examiner to reject claim 14 under 35 U.S.C.

§ 102(b) is reversed; the decision of the examiner to reject claims 3, 4, 8, 9, 28 and 29 under 35 U.S.C. § 103 is affirmed; and the decision of the examiner to reject claims 12, 13, 15 to 26 is reversed.

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

JAMES M. MEISTER)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. McQUADE)	APPEALS
Administrative Patent Judge)	AND
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JEFFREY V. NASE)	
Administrative Patent Judge)	

Appeal No. 1999-0348
Application No. 08/663,471

Page 20

TODD T. TAYLOR
TAYLOR & ASSOCIATES
6115 STONEY CREEK DRIVE
FORT WAYNE, IN 46825

APPEAL NO. 1999-0348 - JUDGE NASE
APPLICATION NO. 08/663,471

APJ NASE

APJ McQUADE

APJ MEISTER

DECISION: **AFFIRMED-IN-PART**

Prepared By: Gloria Henderson

DRAFT TYPED: 21 Jun 99

FINAL TYPED: