

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

---

Ex parte YAAKOV BRODY

---

Appeal No. 2002-2243  
Application No. 09/768,321

---

ON BRIEF

---

Before COHEN, STAAB and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 21, 23, 24 and 26, which are all of the claims pending in this application.

BACKGROUND

The appellant's invention relates to a method of making a mulch for eradicating termites without poisoning soil comprising spraying at least one of tree bark and wood chips with an aqueous solution of a borate salt. A copy of the claims under appeal is

set forth in the appendix to the appellant's brief and independent claims 21 and 23 are reproduced, infra, in the opinion section of this decision.

The following rejections are before us for review.

Claims 21 and 24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Palmere<sup>1</sup>.

Claims 23 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Palmere.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the final rejection and answer (Paper Nos. 6 and 14) for the examiner's complete reasoning in support of the rejections and to the brief and reply brief (Paper Nos. 13 and 15) for the appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied Palmere patent, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Independent claims 21 and 23 on appeal read as follows:

21. A method of making a mulch for eradicating termites without poisoning soil comprising spraying at least one of tree bark and wood chips with an aqueous solution of a

---

<sup>1</sup> U.S. Patent No. 5,104,664, issued April 14, 1992 to Palmere et al.

borate salt in a concentration sufficient to produce a mulch ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch.

23. A method of making a mulch for eradicating termites without poisoning soil comprising spraying at least one of tree bark and wood chips with an aqueous solution of a borate salt in a concentration of about 0.5 weight percent to produce a mulch ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch.

### ***The anticipation rejection***

Turning first to the rejection of claim 21 as being anticipated by Palmere, we observe that claim 21 is rather inartfully drafted. Specifically, the limitation “in a concentration sufficient to produce a mulch ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch” would mean nothing to one of ordinary skill in the termite control art without some understanding of the total quantity of solution applied to the tree bark and wood chips. As recognized on pages 6-7 of appellant’s specification, “[t]he percentage of the borate salt in the cellulose article” is of significance; if the concentration is too high, termites may be repelled and not eat the cellulose and if the concentration is too low, loss of the borate salt into the adjacent soil from the cellulose article may exhaust the effective supply of the salt prematurely. Further, as evidenced by Palmere (column 15, lines 36-61), it is understood in the termite control field that it is the quantity of boron applied to the material in question or, more precisely, the concentration or ratio of borate salt to wood and bark (brief, page 5), rather than the concentration of the borate

salt solution alone, which determines the efficacy of the borate salt in eradicating or repelling termites from the material. In other words, as explained by Palmere (column 15, lines 42-44), a very dilute solution of borate salt can be applied to a material in an amount effective to prevent or eradicate infestation in the material by applying larger quantities of the solution, such as by multiple applications.

While it is true that the claims in a patent application are to be given their broadest reasonable interpretation consistent with the specification during prosecution of a patent application (see, for example, In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)), it is also well settled that terms in a claim should be construed as those skilled in the art would construe them (see Specialty Composites v. Cabot Corp., 845 F.2d 981, 986, 6 USPQ2d 1601, 1604 (Fed. Cir. 1988) and In re Johnson, 558 F.2d 1008, 1016, 194 USPQ 187, 194 (CCPA 1977)).

In light of the above discussion, we conclude that one of ordinary skill in the field of appellant's invention would have understood the step of "spraying at least one of tree bark and wood chips with an aqueous solution of a borate salt in a concentration sufficient to produce a mulch ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch" recited in claim 21 to require spraying the solution in a concentration and a quantity or amount which is ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch. In other words, the spraying step must produce a mulch which contains a sufficient amount of borate salt to kill termites

in a colony remote from the mulch but insufficient to protect the mulch itself from termite infestation.

Palmere teaches application of boron containing formulations to decorative bark mulch “to protect it from infestation” (column 22, lines 14-16). While Palmere does disclose applying either undiluted formulations, in which the boron containing compound ranges from about 20% to about 50% by weight of the formulation (column 13, lines 44-48), or formulations diluted with water by as much as 100 times the weight of the undiluted composition (column 16, lines 20-22), in which the boron containing compound is on the order of about .55% by weight of the formulation, Palmere repeatedly makes it quite clear that the objective of the treatment is to apply sufficient amounts of the boron containing compound to the material to protect it from infestation or to prevent or eradicate infestation from the material. Consequently, Palmere cannot be considered to disclose the step of spraying the tree bark or wood chips to produce a mulch ineffective in protecting the mulch from infestation by termites as required by claim 21. We thus reach the conclusion that the subject matter of claim 21 is not anticipated<sup>2</sup> by Palmere. Accordingly, we shall not sustain the examiner’s rejection of claim 21 or of claim 24, which depends from claim 21.

***The obviousness rejection***

---

<sup>2</sup> Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Our discussion, supra, with respect to our interpretation of claim 21 applies likewise to claim 23. In other words, we interpret claim 23, consistent with the understanding of one of ordinary skill in the field of appellant's invention, as requiring a step of spraying the tree bark or wood chips with an aqueous solution of borate salt in a concentration and an amount to produce a mulch ineffective in protecting the mulch from infestation by termites and effective in killing termites in a colony remote from the mulch. As pointed out above, Palmere is clear and unambiguous in teaching the application of a boron containing compound to a material in an amount effective in protecting the material from termite infestation. While Palmere does teach the use of diluted formulations (1:100 dilutions) in which the concentration of boron containing compound is "about 0.5 weight percent" of the formulation as called for in claim 23, Palmere provides absolutely no teaching or suggestion to apply these formulations in amounts ineffective to protect the material from termite infestation.

While the examiner's general observation (answer, page 4) that one skilled in the art would have found it obvious to employ routine experimentation in determining the exact concentration of borate salt to suit his or her purpose may be correct, Palmere does not teach or suggest the purpose of achieving the result called for in claim 23, namely, producing a mulch ineffective in protecting the mulch from termite infestation. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.

See In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

For the reasons cited above, the examiner has failed to adduce evidence sufficient to establish a prima facie case of obviousness of the subject matter of claim 23. Thus, we shall not sustain the rejection of claim 23 or claim 26 which depends from claim 23.

CONCLUSION

To summarize, the decision of the examiner to reject claims 21 and 24 under 35 U.S.C. § 102(b) and claims 23 and 26 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

)  
)  
)  
)  
)  
) BOARD OF PATENT  
) APPEALS  
) AND  
) INTERFERENCES  
)  
)  
)  
)

Appeal No. 2002-2243  
Application No. 09/768,321

Page 9

LEYDIG VOIT & MAYER, LTD  
700 THIRTEENTH ST. NW  
SUITE 300  
WASHINGTON, DC 20005-3960