

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 39

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT R. EMMRICH,
JOHN W. MIKKONEN, and
THOMAS A. LAJINESS

Appeal No. 2000-0345
Application No. 08/419,219

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and GREEN, Administrative Patent Judges,
GREEN, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 8-13, which are all of the claims currently pending in the application.

Claim 8 is representative of the subject matter on appeal, and reads as follows:

8. A method for controlling flying insects comprising the steps of:
 - a. providing an insect control article having a substrate with an essentially open surface that is impregnated with an active insect control ingredient in a structure such that the ingredient will readily passively evaporate when exposed to air, wherein the active insect control ingredient is selected from the group consisting of transfluthrin, prallethrin, vaporthrin, tefluthrin, and combinations thereof;
 - b. placing the insect control article in an environment with air movement and exposing the substrate of the insect control article thereto; and
 - c. allowing the active insect control ingredient impregnated within the substrate to passively evaporate into the air in an environment free of added heat.

The examiner relies on the following reference:

Landsman et al. (Landsman)	3,295,246	Jan. 3, 1967
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In addition, we refer to the following references, which were made of record during the prosecution of the instant application, and are referred to on pages 2 and 3 of the specification, respectively.

Kauth et al. (Kauth)	4,796,381	Jan. 10, 1989
Clarke	2,720,013	Oct. 11, 1955

Claims 8-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Landsman. After careful review of the record before us, we reverse the rejection. We do, however, conclude that the claims on appeal are unpatentable over the prior art of record, and thus enter new grounds of rejection under 37 CFR § 1.196(b).

BACKGROUND

The specification discloses a process for controlling flying insects. The process utilizes a substrate that is impregnated with an insecticide that is capable of passively evaporating into the surrounding environment. An insect control article containing the substrate is placed in an environment that allows for the substrate to be exposed to air movement. The insecticide impregnated in the substrate is then allowed to passively evaporate into the air. See Specification, pages 4-5. According to the specification, the insect control articles “are effective in killing or repelling mosquitoes within the air of a room or the volume of air in the vicinity of a person sitting on a patio, at a picnic table, or the like.” Id. at page 1.

DISCUSSION

The Examiner’s Answer rejects claims 8-14 under 35 U.S.C. § 102(b) as being anticipated by Landsman. Due to its brevity, the entire rejection is set forth below.

Landsman et al relates to an insect repellent tape which may be placed in and around rooms for insecticidal purposes. The absorbent strip base material is of an absorbent paper. The preferred residual insecticidal materials are used in the form of 3 to 10% emulsions. Desirably these compounds are further saturated upon the absorbent tape. (Note column 1, lines 8-11; 56-70; column 2, lines 8-9; column 3, lines 48-51; lines 72-75). The reference shows pyrethrins as a strip e.i. [sic] (Page 7, lines 20-45.) At varying concentrations. [sic] (Line 43 of column 7-line 6 of column 8). The efficacy of pyrethrin transfluthrin and prallethrin insecticides is known.

Answer, page 3.

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Appellants contend in response, among other things, that the disclosure of pyrethrins is not a disclosure of the synthetic insecticides specifically listed in claim 8, and their disclosure by Landsman consequently cannot serve as an anticipatory disclosure, regardless of the fact that they can also function as insecticides. We agree that the position of the examiner is hard to uphold on the record before us.

The rejection, as set forth above, suffers from several deficiencies. First, it does not acknowledge the standard required for a reference to be anticipatory. Moreover, it does not set forth how the reference reads on each and every limitation of the independent claim, and does not even allude to many of the limitations contained in the dependent claims.

In order for a reference to be anticipatory, it must disclose, either explicitly or implicitly, every element of the claim. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). Landsman indeed teaches that pyrethrins may be part of the insecticidal tape. The reference, however, fails to teach the use of any of the specifically claimed insect control ingredients, i.e., transfluthrin, prallethrin, vaporthrin and tefluthrin. Thus, the Landsman reference fails to disclose all of the limitations of claim 8, and is therefore cannot serve as an anticipatory reference. That conclusion is supported by the rejection itself, which states that “[t]he efficacy of pyrethrin transfluthrin and prallethrin insecticides is known.” Such a statement speaks more to the obviousness of the claimed invention than to anticipation of the claimed invention.

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Since the remaining claims all depend from claim 8, the reference fails to anticipate the remaining claims on appeal as well. The rejection under 35 U.S.C. § 102(b) is accordingly reversed. We do, however, enter new grounds of rejection under 37 CFR § 1.196(b).

REJECTION UNDER 37 CFR § 1.196(b)

1. 35 U.S.C. § 102(b)

Claims 8-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kauth.

Kauth teaches an insect control article comprising a carrier material and one or more insecticidal compositions, wherein the insect control article may be hung in a clothes closet for the control of textile insects, such as the clothes moth, the fur moth, the larder beetle and the fur beetle. See Kauth, col. 1, lines 11-20 and lines 61-66. The reference specifically discloses that pyrethroid insecticides, such as vaporthrin, applied to a carrier material in an amount of 0.2-5 g/m², see id. at col. 2, lines 14, 15 and 22, and also discloses the use of carrier materials such as paper, cardboard, plastic films, textile materials or non-woven materials, see id. at lines 27-29. Kauth specifically exemplifies an insect control article wherein paper is used as the carrier material, which is coated with 4 or 8 mg/cm² of vaporthrin at room temperature.

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Thus, the reference specifically teaches a method of controlling flying insects (textile insects), wherein an insect control article having an essentially open surface (carrier materials such as paper) is impregnated with one of the insecticides specifically recited in claim 8, i.e., vaporthrin. The fact that the insecticidal composition of Kauth may be hung in a closet for insect control, and that Kauth uses carrier materials such as paper as claimed in instant claim 9, implicitly requires that the insect control ingredient will readily passively evaporate when exposed to air. The hanging of the insecticidal composition of Kauth in a closet at room temperature reads on the steps of “placing the insect control article in an environment with air movement and exposing the open surface of the insect control article thereto,” and “allowing the active insect control ingredient impregnated within the substrate to passively evaporate into the air in an environment free of added heat.”

On pages 2-3 of the specification, Kauth is distinguished on the basis that the insect control article are designed to be hung in closets or placed in drawers, “suggesting that they are understood to be inadequate to protect larger, more open spaces,” and that “[n]othing in Kauth et al. suggests any ability of their paper or textile strips to control insects in relatively larger air volumes when held with a moving air stream.” Claim 8, however is not limited to a method wherein the insect control article is used to protect large areas such as a large room or an outdoor picnic table or patio, and

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does not exclude the practice of the method in a smaller enclosed space such as a closet. Therefore Kauth anticipates the method recited in claim 8.

Claim 9 requires that substrate or carrier material be “selected from the group consisting of paper-board, open pore cellulosic materials, coiled, corrugated paper, woven cloth and non-woven pads or felts of any suitable fiber, gels, and absorbent solid-porous foams.” As Kauth teaches that the carrier may be paper, cardboard and textiles, claim 9 is also anticipated by the Kauth reference.

Claim 10 requires that the insect control material be impregnated within the substrate in an amount of 0.1 to 10 mg/cm². As Kauth exemplifies an insect control paper strip coated with 4 or 8 mg/cm² of vaporthrin, claim 10 is also anticipated.

2. 35 U.S.C. § 103(a)

Claims 11, 13 and 14 are obvious over the teachings of Kauth, and thus do not meet the statutory requirements of 35 U.S.C. § 103(a).

The teachings of the Kauth reference are set forth above. Claim 11 requires that the insect control article also include a “hanger means for hanging the impregnated substrate in a suitable environment for use.” This limitation is set forth as “means plus function,” thus we must look to the specification to determine the structures that serve as the “hanger means.” See In re Donaldson, 16 F.3d 1189, 1192, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994). The specification states that “[e]xamples of suitable hanger or attachment means . . . include hooks, strings, mechanical clips and fasteners,

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adhesives, and the like.” Specification, page 9, lines 28-30. The Kauth patent teaches that its insect control article may be hung in a closet, but does not provide any specific structures by which the insect control article may be hung. We take Official Notice that the use of hanging means such as hooks, strings, adhesives and the like are well known in the art of pest control.¹ Thus, it would have been obvious to the ordinary artisan to use hanging means such as hooks, strings, adhesives, etc., as set forth in the specification because the use of such structures to hang an article such as an insect control strip is well known and routine in the art, and Kauth specifically teaches that the insect control article may be hung in a closet.

Claim 13 requires that the insect active control ingredient include transfluthrin or tefluthrin, and claim 14 requires that the insect active control ingredient include transfluthrin. As discussed above, Kauth teaches the use of pyrethroids such as vaporthrin, but does not suggest the use of the pyrethroids transfluthrin or tefluthrin. We note that the specification infers that the pyrethroids transfluthrin or tefluthrin are known insecticides, thus we take Official Notice of their known use as insecticides.² It would have been obvious to the routineer to use a pyrethroid such as transfluthrin or tefluthrin

¹ If Appellants dispute that these structures are not well known in the art for use as means to hang a pest control article, they are required to make their challenge of record in response to the above new grounds of rejection. If no such challenge is made of record in the response, the fact that is the subject of the Official Notice will be deemed to be admitted as fact.

² Again, if Appellants wish to challenge the fact the pyrethroids transfluthrin or tefluthrin are known insecticides, they must make that challenge of record in response to the above new grounds of rejection. Otherwise, the fact will be deemed as admitted by Appellants.

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because the efficacy of such compounds in controlling insects such as flying insects in known in the art.

Claim 12 is obvious over the teachings of Kauth and Clarke, and thus also does not meet the statutory requirements of 35 U.S.C. § 103(a).

Claim 12 requires that the insect control means also include a means for attaching the article to a means for circulating air, and wherein the step of “placing the insect control article in an environment with air movement and exposing the substrate of the insect control article thereto includes the step of attaching the control article to means for circulating air at a selected location not in contact with any fan blades thereof.”

Again, we need to determine what structures correspond to the “attaching means” and the “means for circulating air.” See id. As defined discussed above, “[e]xamples of suitable hanger or attachment means . . . include hooks, strings, mechanical clips and fasteners, adhesives, and the like.” Specification, page 9, lines 28-30. With respect to the “means for circulating air,” the only structure disclosed by the specification is a conventional room fan. See id. at lines 27-28.

The teachings of Kauth are discussed above. Kauth does not teach attaching the insect control article to a conventional room fan.

Clarke teaches an article for distributing an insecticide in rooms and other enclosed spaces, and specifically teaches that the article has household uses. See Col.

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1, lines 15-19, and Fig.1, which shows a conventional room fan. The reference teaches the attachment of a solid insecticide to a blade of a fan, wherein the insecticide is impregnated into a flexible carrier which is then attached to a blade of the fan by means such as an adhesive. See id. at lines 68-72. In addition, Clarke teaches that the “adhesive composition is not critical except that it provide sufficient bonding action to hold the insecticide carrier to the blades under the centrifugal forces normally rotated by rotation of the fan blades,” id. at col. 2, lines 34-37. The attachment of the insecticide to the fan blades allows the insecticide vapors to be “intimately and uniformly mixed with relatively large volumes of air, thus assuring complete distribution of the insecticide throughout the room or other space to be treated, and insuring against dangerous, toxic concentrations in any isolated area of the room.” Id. at lines 55-61.

It would have been obvious to one of ordinary skill in the art to attach the insect control article of Kauth to a conventional room fan because Clarke teaches that attachment of an insecticide to a fan blade allows for complete distribution of the insecticide throughout the room. Kauth teaches the use of the insect control article in a closet, and the ordinary artisan would have recognized that more complete distribution of the insecticide would provide more complete protection against textile insects, especially in closets, where clothes and other articles may be closely hung together, preventing the insecticide from diffusing through the entire closet. In addition, it would have been obvious to the routineer to attach the insect control article to a part of the fan

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other than the blades as attachment to a part other than the fan blades, such as the front of the fan, would still allow for the distribution of the insecticide throughout the room, and would also allow for greater selection of ways to attach the insect control article to the fan, as one would no longer be concerned with using a means for attachment, such as an adhesive, that can withstand the “centrifugal forces” generated by the fan blades.

CONCLUSION

For the reasons set forth above, the rejection under 35 U.S.C. § 102(b) set forth in the Examiner’s Answer is reversed, and new grounds of rejection are set forth under 37 CFR § 1.196(b).

TIME PERIOD FOR RESPONSE

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) provides that, “A new ground of rejection shall not be considered final for purposes of judicial review.”

37 CFR § 1.196(b) also provides that the appellant(s), WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

- (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

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(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

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

REVERSED; 37 CFR § 1.196(b)

SHERMAN D. WINTERS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
WILLIAM F. SMITH)	
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