

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

Ex parte DAVID W. KOENIG

Appeal No. 2006-0185
Application No. 10/159,253

ON BRIEF

Before ADAMS, MILLS and GRIMES, Administrative Patent Judges.

GRIMES, Administrative Patent Judge.

DECISION ON APPEAL

This appeal involves claims to a personal care absorbent article and method for inhibiting attachment of yeast to skin, which the examiner has rejected as obvious and provisionally rejected for obviousness-type double patenting. We have jurisdiction under 35 U.S.C. § 134. We vacate the double-patenting rejection and affirm the obviousness rejections.

Background

The specification discloses that “[b]y incorporating an effective amount of farnesol or other isoprenoid compound...into a skin-contacting surface of a personal care article,

the resulting article acts to prevent the attachment of pathogenic yeast or other pathogenic fungi to the wearer's skin during use." Page 3, lines 17-22. In a preferred embodiment, the specification also states that "[t]he isoprenoid compound can be applied to the article in solution at a concentration of between about 0.001% and about 2% by weight of the solution." Page 3, line 22 – page 4, line 4. Also, "suitable personal care articles include, but are not limited to...health care articles, such as medical care articles, dental care articles, veterinary care articles, bandages, and wound dressings...[and] include pre-moistened wipes, absorbent wipes, bath tissue, facial tissue, lotions, and creams." Page 15, lines 11-22.

Discussion

1. Claim construction

Claims 1, 3-6, 8-24, and 26-57 are pending. Since Appellant has not argued the claims separately, they will stand or fall together. See 37 CFR 41.37(c)(1)(vii). We will focus on claim 1 as the representative independent claim; claims 3-6, 8-24, and 26-57 will stand or fall with claim 1. Claim 1 reads as follows:

1. A personal care absorbent article, comprising:

a personal care absorbent article substrate; and

an isoprenoid compound comprising at least one of the group consisting of farnesol, atlantol, (-)alpha-bisabolol, spathulenol, borneol, trans-pinocarveol, and combinations thereof; wherein the isoprenoid compound is applied to at least a skin-contacting surface of the substrate in an amount effective to inhibit pathogenic fungi attachment to skin; and wherein the pathogenic fungi comprises at least one of the group consisting of Candida albicans, Mallessia, Tricophyton, Epidermophyton, Scytalidium, Fusarium, Acremonium, Aspergillus, Scopulariopsis, and Pityrosporum.

Thus, claim 1 is directed to a personal care absorbent article, e.g., a wipe or wound dressing, comprising a substrate and an isoprenoid compound, e.g., farnesol, applied to a skin-contacting surface of the substrate in an amount effective to inhibit pathogenic fungi, e.g., Candida albicans, from attaching to skin. The specification states that an effective amount of the isoprenoid compound in solution is a concentration of between about 0.001% and about 2% by weight of the solution.

2. Double Patenting

The examiner provisionally rejected claims 1, 3-6, 8-24, and 26-57 for obviousness-type double-patenting over claims 1-109 of Syverson¹ in view of DiPippo.² Because independent claim 1 of Syverson has been amended to require an isoprenoid compound and myreth-3-myristate, the examiner's rationale for the rejection no longer applies. Thus, we vacate the rejection for obviousness-type double-patenting.

3. Obviousness in view of Piccini and Johnson

The examiner rejected claims 1, 3-6, 8-24, and 26-57 under 35 U.S.C. § 103 as obvious over Piccini³ and Johnson.⁴ Piccini teaches a disinfecting wipe that "comprises a substrate and a disinfecting agent." Column 3, lines 12-14. Piccini also teaches that the "disinfecting wipes...allow significant reduction in the amount of bacteria on an infected surface. Indeed, effective disinfecting may be obtained on various micro-organisms including...more resistant micro-organisms like fungi (e.g., Candida albicans)

¹ Syverson et al., copending Application No. 09/969,199.

² DiPippo et al., U.S. Patent 5,753,257, issued May 19, 1998.

present on infected surfaces.” Column 8, lines 12-20. Examples of such surfaces include human skin. Column 1, lines 26-38.

Johnson teaches an isoprenoid compound, or more specifically, “a sesquiterpenoid [that] include[s] farnesol.” Column 3, lines 27-29. Johnson also teaches the “farnesol...promote[s] the uptake of exogenous compounds, including antibiotics, by cells of gram-positive bacteria and fungi, such as yeasts.” Column 4, lines 25-29. Johnson further teaches “a solution comprising a sesquiterpenoid and an antimicrobial compound. The composition is preferably applied in the form of a solution to be sprayed or wiped on the surface.” Column 4, lines 13-16. In addition, Johnson teaches that an effective amount of farnesol would be “between 0.1 mM and 50 mM.” Column 3, lines 18-19.

We agree with the examiner that these disclosures would have made the presently claimed personal care absorbent article prima facie obvious to a person of ordinary skill in the art. Specifically, it would have been obvious to provide a wipe comprising an isoprenoid compound, e.g., farnesol, and an antimicrobial compound. Motivation to combine the farnesol-containing composition taught by Johnson with the wipe taught by Piccini is provided in Johnson where such a composition can be wiped on a surface in order to disinfect it. Column 4, lines 9-16. Furthermore, the range of effective amounts disclosed in the specification overlaps the range of effective amounts disclosed by Johnson.⁵

³ Piccini et al., EP 1 059 032, issued December 13, 2000.

⁴ Johnson et al., U.S. Patent 6,319,958, issued November 20, 2001.

⁵ Farnesol has a molecular weight of 222.37. See Johnson, Fig. 1 (showing farnesol's chemical formula). Therefore, a concentration of 1 M corresponds to 222.37 grams/liter. Johnson discloses that concentrations of 0.1 mM to 50 mM (column 3, lines 18-19) facilitate uptake of antimicrobial compounds;

Appellant argues that “[n]either Piccini nor Johnson, alone or in combination, disclose or suggest that isoprenoid compounds, particularly farnesol, inhibit Candida albicans.” Appeal Brief, page 10. Appellant argues that the examiner is “using improper hindsight” by “overstating the disclosures of Piccini and Johnson, and making the substitution of farnesol into the wipe of Piccini us[ing] information gleaned only from Applicant’s disclosure, not the cited references or the knowledge of one skilled in the art at the time of the invention.” Appeal Brief, page 8 (emphasis added).

As we understand it, Appellant’s argument is that Piccini would not have led those skilled in the art to replace or substitute the cedrol disclosed by Piccini with the farnesol disclosed in Johnson because motivation is not found in the references or from knowledge of one skilled in the art at the time of the invention, but rather from information gleaned from the specification. However, we do not find this argument persuasive.

It has been held that “[a]ny judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure, such a reconstruction is proper.” In re McLaughlin, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). In this case, Johnson teaches that a solution comprising the

those concentrations correspond to 22.34 mg/liter to 11.17 grams/liter. The instant specification discloses that an effective amount of an isoprenoid compound is 0.001% to about 2% by weight of solution (page 4, lines 1-2). A concentration of 1% by weight of solution is 1 gram/100 milliliters, or 10 grams/liter. Therefore, the range of effective amounts disclosed in the specification corresponds to 10 mg/liter to 20 grams/liter.

sesquiterpenoid, e.g., farnesol, combined with an antibiotic can be “applied in the form of a solution to be...wiped on [a] surface.” Column 4, lines 14-16. As discussed above, Piccini teaches a disinfecting wipe that “comprises a substrate and a disinfecting agent.” Column 3, lines 12-14. Piccini also teaches that the “disinfecting wipes...allow significant reduction in the amount of bacteria on an infected surface. Indeed, effective disinfecting may be obtained on various micro-organisms including...more resistant micro-organisms like fungi (e.g., Candida albicans) present on infected surfaces.” Column 8, lines 12-20. As a result, it would have been obvious from the Piccini and Johnson references, and not from improper hindsight reasoning, to provide a wipe having farnesol and an antimicrobial compound to inhibit *Candida albicans*.

Appellant also argues that “Johnson only teaches sesquiterpenoids such as farnesol are useful for enhancing uptake of distinct, separate antimicrobial compounds (Col. 3, lines 3-15), but Johnson nowhere discloses that farnesol, or any other isoprenoid compound, is alone (without the combined antimicrobial agent) effective in inhibiting Candida albicans.” Appeal Brief, page 10 (emphasis added).

As we understand it, Appellant’s argument is that Johnson does not provide motivation because the reference does not disclose that farnesol, by itself and without other agents, is effective in inhibiting Candida albicans. However, we also do not find this argument persuasive.

Claim 1 is not limited to a composition in which farnesol is the only active ingredient. Rather, claim 1 uses open claim language (“comprising”) and therefore reads on applying a composition containing farnesol and anything else, including other

antimicrobial agents, for inhibiting Candida albicans. The product of claim 1 is suggested by the prior art.

Appellant also argues that there is no expectation that farnesol would inhibit attachment to skin. Appeal Brief, page 11. However, claim 1 is directed to a product having certain limitations. The product defined by claim 1 is suggested by the cited references. It makes no difference, with respect to obviousness, that the references would have led a skilled artisan to combine their teachings for a reason different from that of Appellant. See In re Dillon, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (“[I]t is not necessary in order to establish a prima facie case of obviousness . . . that there be a suggestion in or expectation from the prior art that the claimed compound or composition will have the same or a similar utility as one newly discovered by applicant.”).

Claim 1 reads on the product made obvious by Piccini and Johnson and is therefore unpatentable. Claims 3-6, 8-24, and 26-57 fall with claim 1. The examiner’s rejection is affirmed.

4. Obviousness in view of DiPippo and Johnson

The examiner rejected claims 1, 3-6, 8-24, and 26-57 under 35 U.S.C. § 103 as obvious over DiPippo in view of Johnson. DiPippo teaches “a burn dressing in the form of a...synthetic fabric containing a therapeutic...gel.” Column 2, lines 11-15.

Johnson teaches an isoprenoid compound, or more specifically, “a sesquiterpenoid [that] include[s] farnesol” as discussed above. Furthermore, Johnson teaches that “the sesquiterpenoid and antimicrobial compound [can be applied] to human

or animal skin. For example, one might apply a cream or ointment comprising the sesquiterpenoid and antimicrobial compound to a wound.” Column 2, lines 18-22. Moreover, the “composition [may be used] to treat surface wounds or as a general antibacterial treatment.” Column 3, lines 58-59.

We agree with the examiner that these disclosures would have made the presently claimed personal care absorbent article prima facie obvious to a person of ordinary skill in the art. Specifically, it would have been obvious to add farnesol and an antimicrobial compound to a wound dressing in an amount effective to inhibit the attachment of Candida albicans to skin. Motivation to include farnesol and an antimicrobial compound on a wound dressing is provided by Johnson’s disclosure that, in the presence of a sesquiterpenoid such as farnesol, microorganisms such as fungi are inhibited and the efficacy of antimicrobial agents is increased. Column 2, lines 17-22; Column 3, lines 12-15. As discussed above, the range of effective amounts disclosed in the specification overlaps the range of effective amounts disclosed by Johnson.

Appellant argues that “one skilled in the art reading DiPippo (without the benefit of Applicant’s Specification) would not find teaching or suggestion therein that any or all isoprenoid compounds inhibit Candida albicans.” Appeal Brief, page 13. Appellant argues that the examiner is “using improper hindsight in substituting the farnesol of Johnson into the combination of DiPippo” when “the [e]xaminer is clearly gleaning information from Applicant’s Specification”. Appeal Brief, page 13 (emphasis added).

As we understand it, Appellant presents the same arguments for improper hindsight reasoning discussed above. Again, we do not find this argument persuasive for the reasons stated above. To summarize, Johnson teaches the use of farnesol for

treating wounds (Column 2, lines 19-22) and DiPippo teaches a wound dressing containing a therapeutic gel. As a result, we agree with the examiner that the combination of DiPippo and Johnson would have made the product of instant claim 1 obvious to a person of ordinary skill in the art.

Appellant also argues that “one skilled in the art reading Johnson would reasonably infer that farnesol alone (without the anti-microbial agent) does not inhibit or destroy any fungus.” Appeal Brief, page 14 (emphasis added).

As we understand it, Appellant presents the same arguments discussed above. For the same reasons provided, we do not find these arguments persuasive. We agree with the examiner that the combination of DiPippo and Johnson is obvious.

Claim 1 reads on the product made obvious by DiPippo and Johnson and is therefore unpatentable. Claims 3-6, 8-24, and 26-57 fall with claim 1. The examiner’s rejection is affirmed.

Summary

We affirm both rejections of claims 1, 3-6, 8-24, and 26-57 under 35 U.S.C. § 103. Since our reasoning differs from that of the examiner, however, we designate our affirmance as a new ground of rejection under 37 CFR § 41.50(b) in order to give Appellant a fair opportunity to respond.

Time Period for Response

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz.

Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, 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 the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

AFFIRMED

Donald E. Adams)
Administrative Patent Judge)
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)
) BOARD OF PATENT
Demetra J. Mills)
Administrative Patent Judge) APPEALS AND
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) INTERFERENCES
)
Eric Grimes)
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