

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER HILFENHAUS,
HEIKE JOHN, and
HARALD BUTTNER

Appeal 2008-3013
Application 11/255,956
Technology Center 1700

Decided: July 23, 2008

Before BRADLEY R. GARRIS, CATHERINE Q. TIMM, and
KAREN M. HASTINGS, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

The invention relates to a wound covering article.

Claim 1 on appeal is illustrative:

1. A wound covering article comprising an antimicrobial composite which comprises a first, liquid-permeable layer and a second layer over the first layer, wherein an antimicrobial metal in elemental form is present as such between the first and second layers, the article further comprising a backing material arranged on the second layer and being substantially free of antimicrobial metal in elemental form on external surfaces thereof.

The following prior art is relied upon by the Examiner in the § 103 rejection of the claims on appeal:

Burrell	US 2003/0054046 A1	Mar. 20, 2003
Burton	6,903,243 B1	Jun. 7, 2005

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Burrell in view of Burton.

All the claims have also been rejected under the judicially created doctrine of obviousness-type double patenting over copending Application Nos. 10/654,949¹ and 11/255,957². Although the Appellants state these grounds of rejection are not part of this appeal (App. Br. 5), the Examiner states that these rejections have not been withdrawn (Ans. 2). Thus, we summarily affirm the obviousness-type double patenting rejections.

¹ This application was published as US 2004/0259445 A1 on Dec. 23, 2004, and is currently also on appeal; Appeal No. 2008-3401.

² This application was published as US 2006/0057914 A1 on Mar. 16, 2006, and is currently also on appeal; Appeal No. 2008-3636.

ISSUE ON APPEAL

The issue on appeal arising from the contentions of Appellants and the Examiner is whether Appellants have shown reversible error in the Examiner's determination that the combination of Burrell and Burton teaches or suggests that a wound covering article may be "substantially free of antimicrobial metal in elemental form on external surfaces" as recited in claim 1.

FINDINGS OF FACT

The following findings of facts (FF) are supported by a preponderance of the evidence. Additional findings of fact as necessary appear in the Analysis portion of the opinion.

Burrell

1. Burrell describes that crystalline forms of antimicrobial metals can be prepared as coatings or powders which may be incorporated into wound dressings (e.g., p. 7, [0098], [0102]; p. 11, [0148]). The wound dressing (i.e., wound covering article) may comprise multiple layers of various materials (p. 8, [0105]-[0110]). Burrell does not explicitly state that the wound dressing is substantially free of antimicrobial metal in elemental form on external surfaces thereof.

2. Burrell teaches that "coatings of the antimicrobial metals are most preferably deposited onto substrates such as dressings, for example one or more layers of medical dressing materials which can be laminated with **uncoated** layers of medical dressing materials" (Burrell, p. 5, ¶ [0055]; emphasis provided).

3. Burrell teaches that a coating of one or more antimicrobial metals “is applied to one or more of the [multiple] dressing layers, but is **most preferably** applied at least to the skin facing layer.” (p. 8, ¶ [0114]; emphasis provided). Burrell further teaches “the antimicrobial metal is deposited as a thin metallic film on one or more surfaces of the [multi-layered] dressing by vapour deposition techniques.” (p. 9, ¶ [0120]).

4. Still further, Burrell teaches that antimicrobial metal “powders may be incorporated **into or onto** medical dressings” (p. 11, ¶ [0148]; emphasis provided).

5. In context, Burrell’s teaching that “[f]or direct application to the skin, [antimicrobial metal] powders are preferably sized...” is also an implicit teaching of embodiments wherein there is no direct application to the skin of the antimicrobial metal (Burton, p. 11, ¶ [0149]).

6. Burrell claims “the one or more antimicrobial metals are provided as a coating **on, or filler in,** a dressing” (claim 11; emphasis provided).

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.’” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1734 (2007).

Facts relevant to a determination of obviousness include (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of skill in the art, and (4) any

relevant objective evidence of obviousness or non-obviousness. *KSR*, 127 S. Ct. at 1734; *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

The question under 35 U.S.C. § 103 is not merely what the references teach but what they would have suggested to one of ordinary skill in the art at the time the invention was made. All disclosures of the prior art must be considered. *In re Lamberti*, 545 F.2d 747, 750 (CCPA 1976).

KSR also states “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 127 S. Ct. at 1739. The question to be asked is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

ANALYSIS

We have thoroughly reviewed each of Appellants’ arguments for patentability. We are in full agreement with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the Examiner’s rejections under 35 U.S.C. § 103(a) for reasons expressed in the Answer and those set out herein.

Appellants do not argue these claims separately with any reasonable specificity (App. Br. 6-12; Reply Br. 1-4).³ We therefore select independent claim 1 to represent this claim grouping.

³ Appellants state that the rejection “almost exclusively” does not indicate the relationship between the disclosure of Burrell and any of the rejected claims, and since no specific reasons were given for the rejections of all of the claims, Appellants are “not in a position to specifically address such reasons” (App. Br. 8). However, we understand the Examiner’s position. It

The Examiner finds, and Appellants do not dispute, that the combination of Burrell and Burton suggests every limitation in claim 1 except that there is no explicit teaching that the dressing (i.e., the wound covering article) is substantially free of antimicrobial metal in elemental form on the external surfaces thereof (FF 1; Ans. 3-6).

The Examiner added Burton to exemplify the obviousness of a “backing material arranged on the second layer” (as recited in claim 1) with adhesive (as required in, e.g., claim 2) (Ans. 6). Although we agree with the Examiner’s findings of fact and conclusion of obviousness based on Burton (Ans. 6), we determine that Burton was unnecessary in the rejection of claim 1, since Burrell also teaches an adhesive backing layer may be used as part of the dressing (see, e.g., p. 8, ¶ [0103]).

Appellants’ main argument is that Burrell does not disclose or render obvious a dressing with substantially no antimicrobial metal present on the exterior surfaces thereof, and “even teaches away therefrom” (App. Br. 8-11). Specifically, Appellants contend that Burrell’s teaching that the antimicrobial coating is “most preferably applied at least to the skin facing layer” means the metal is “necessarily present” on the exterior surfaces of the composite (App. Br. 8; Burrell, p. 8, ¶ [0114]). We disagree.

As the Examiner pointed out, Burrell as a whole does not require antimicrobial metal on external surfaces of the dressing (*see, e.g.*, Ans. 7). We determine that Burrell describes that the antimicrobial metal may be

is apparent from the totality of the record that Appellants also understood the Examiner’s position.

present **within** the dressing layers, versus on external surfaces of the dressing (FF 1-6).

It is axiomatic that claims are given their broadest reasonable interpretation in light of the specification as they would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In this regard, we note that Appellants' Specification defines the expression "present between the first and second layers" used in claim 1, explaining that this expression "does not exclude, but rather includes, composites in which the antimicrobial metal is present **within** the first layer and/or within the second layer instead of its presence between the layers" (Spec. 12: ¶ [0066]). Thus, the claim language encompasses the use of antimicrobial metals within, as well as between, the layers of Burrell.

It is well settled that, "in a section 103 inquiry, 'the fact that a specific [embodiment] is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered.'" *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) (quoting *In re Lamberti*, 545 F.2d at 750). Thus, "[a]ll the disclosures in a reference must be evaluated, including nonpreferred embodiments, and a reference is not limited to the disclosure of specific working examples." *In re Mills*, 470 F.2d 649, 651 (CCPA 1972) (citations omitted).

Thus, even assuming arguendo that Appellants are correct that the disclosure of Burrell makes it clear that not having antimicrobial metal on the skin contacting layer "would not be an advantageous embodiment" (App. Br. 9), and that the top layer of Example 1 of Burrell contains elemental

silver therein (App. Br. 11; Reply Br. 1-3), this does not convince us of reversible error in the Examiner's conclusion of obviousness. We find that even though Example 1 may contain elemental silver (i.e., antimicrobial metal) in the top layer therein as argued by Appellants, Burrell as a whole also would have suggested to one of ordinary skill in the art that the antimicrobial metal may be present **within** the dressing layers, versus on exterior surfaces of the composite (FF 1-6).

Certainly, skill in the art is presumed and we find that one of ordinary skill in the art would have found it obvious to weigh the advantages and disadvantages of including the antimicrobial metal between the layers of the dressing (i.e., **within** the dressing) or on the skin facing layer, in view of the above noted teachings of Burrell (FF 1-6).

Recently, in *KSR Int'l Co. v. Teleflex, Inc.*, the Supreme Court advised that the analysis in support of a conclusion of obviousness need not seek out express teachings that are directed to the subject matter of Appellants' claim since the inferences and creative steps that a person of ordinary skill in the art would have employed can be considered. *KSR*, 127 S. Ct. at 1740. One of ordinary skill in the art is also a person of ordinary creativity, not an automaton. *KSR*, 127 S. Ct. at 1742. We determine that including a known familiar element of an antimicrobial metal within the dressing (that is, between the layers of a dressing), versus on the external skin facing layer of the dressing, would still have been reasonably expected to achieve the predictable result of that known agent. *Id.* at 1739, 1740. *See also Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1364 (Fed. Cir. 2007) (the expectation of success need only be reasonable, not absolute).

Appellants have not shown that there is more than a predictable result flowing from use of an antimicrobial metal within a multi-layered dressing as taught in Burrell.

Appellants contend that it was surprising to find that the antimicrobial metal not in direct contact with the skin functions to provide a sufficient antimicrobial effect. (App. Br. 12). However, Appellants' Specification describes that the metal is "released" to give rise to an antimicrobial effect (e.g., Spec. 16, ¶ [0076]). We fail to see how Appellants' "release" distinguishes over Burrell's "release" of the antimicrobial agent (*see*, e.g., Burrell p. 14, ¶ [0183]), especially when the antimicrobial metal is located within the dressing of Burrell (see also, e.g., FF 5). Further, we note that the language of claim 1 does not preclude the antimicrobial metal from coming into contact with the skin when the wound covering article is in use.

In light of all these circumstances, we agree with the Examiner that it would have been *prima facie* obvious to provide the antimicrobial metal of Burrell within the dressing (i.e., between the first and second layers) and not on external surfaces of the dressing. Thus, the wound covering article defined by claim 1 (as well as claims 2-20 which were not separately argued) would have been obvious to one with ordinary skill in view of Burrell.

In sum, considering the record as a whole, we conclude that the invention of claim 1-20 would have been obvious to one of ordinary skill in the art in view of the combined teachings of Burrell and Burton.

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DECISION

The Examiner's § 103 rejection of claims 1-20 as unpatentable over the combined teachings of Burrell and Burton is affirmed.

The Examiner's obviousness-type double patenting rejections are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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