

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

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

Ex parte LUIZ R. DUARTE and ROGER J. TALISH

Appeal No. 2002-0910
Application No. 09/229,855

ON BRIEF

Before COHEN, ABRAMS 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 1, 3-8 and 11-17. Claims 2, 9 and 10, the only other claims pending in this application, stand withdrawn from consideration as being directed to a non-elected species.

BACKGROUND

The appellants' invention relates to the non-invasive application of ultrasonic energy to enhance or accelerate wound healing, such as ulcers (specification, page 1).

Independent claims 8 and 12 are representative of appellants' invention and read as follows:

8. A method for healing a wound comprising the steps of:

positioning an ultrasonic transducer having an operative surface substantially adjacent to the wound;

fastening the ultrasonic transducer to an exterior portion of a patient's body to secure the operative surface substantially adjacent to the wound;

applying a force during the fastening step to the ultrasonic transducer against the skin adjacent the wound to direct the operative surface of the ultrasonic transducer in a direction toward the wound;

emitting ultrasound from the operative surface toward the wound and away from the wound to contact the wound for causing the healing thereof; and

reflecting the ultrasound emitted away from the wound toward the direction of the wound for causing the healing thereof.

12. A portable therapeutic device for healing a wound comprising:

an ultrasonic transducer having:
an operative surface for emitting ultrasound toward the wound and away from the wound for the healing thereof;
and

a fastener for securing the ultrasonic transducer to an exterior portion of a patient's body where the operative surface is brought substantially adjacent to the wound and for simultaneously applying a force to the ultrasonic transducer against the skin adjacent the wound to direct the

operative surface of the ultrasonic transducer in a direction toward the wound.

The examiner relied upon the following prior art references in rejecting the appealed claims:

Fox	4,787,888	Nov. 29, 1988
Crowley	5,630,837	May 20, 1997
Watanabe et al. (Watanabe)	5,690,608	Nov. 25, 1997

Claims 1, 8 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fox.

Claims 3-7, 11 and 13-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fox in view of Watanabe.

Claims 3-7, 11 and 13-17 stand alternately rejected under 35 U.S.C. § 103(a) as being unpatentable over Fox in view of Crowley.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 29) for the examiner's complete reasoning in support of the rejections and to the brief and reply brief (Paper Nos. 28 and 30) 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.

The anticipation rejection

We note at the outset that appellants have elected to have claims 1 and 12 considered together and claim 8 considered separately in deciding the appeal of the rejection of claims 1, 8 and 12 as being anticipated by Fox. Therefore, in accordance with 37 CFR § 1.192(c)(7), we have selected claim 12 as the representative claim to decide the appeal of the rejection, with claim 1 standing or falling therewith.

Turning first to claim 12, Fox discloses a piezoelectric bandage for percutaneous administration of medicament comprising an ultrasonic transducer 54, 55 having an operative surface for emitting ultrasound toward the skin and a fastener, made up of bandage member 50 and adhesive layer 60, for securing the transducer to an exterior portion of a patient's body and for simultaneously applying a force to the transducer against the skin. While Fox does not expressly teach using the disclosed piezoelectric bandage for healing wounds by applying ultrasound toward and away from the wound for healing thereof, we agree with the examiner that Fox's bandage is fully capable, without modification, of being used for such purpose and that claim 12 requires no more than this.

Appellants' only argument against the rejection of claim 12 is that Fox does not disclose the presence of a wound or imply that the Fox device is used to treat a wound

or accelerate wound healing (brief, pages 5 and 6). This argument is directed to the intended use of the device. It is well settled that the recitation of an intended use for an old product does not make a claim to that old product patentable. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). The examiner was justified in concluding that Fox's bandage is inherently capable of use for healing a wound in the manner set forth in claim 12. At that point, the burden shifted to appellants to show that the Fox bandage did not inherently possess the functionally claimed limitations of the claimed apparatus (i.e, the capability of the Fox bandage to be used in the manner set forth in claim 12). Id., 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432. This appellants have not done. Appellants have not even alleged, much less shown, that Fox's bandage is incapable of the use called for in claim 12.

For the foregoing reasons, we shall sustain the examiner's rejection of claim 12, as well as claim 1 which falls therewith, as being anticipated¹ by Fox.

Claim 8, on the other hand, is directed to a method for healing a wound and requires, inter alia, steps of positioning an ultrasonic transducer having an operative surface substantially adjacent to the wound, fastening the transducer to an exterior portion of a patient's body to secure the operative surface substantially adjacent the wound and emitting ultrasound from the operative surface toward the wound and away

¹ Anticipation does not require that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

from the wound to contact the wound for causing healing thereof. As pointed out by the examiner, Fox discloses, in the background of the invention, that “[i]n addition to drug delivery, another broad application area for ultrasonics is in improved wound healing, because it has been well established that ultrasound by itself can speed up the healing process in open wounds” (column 1, lines 30-33). Fox, however, makes no further mention of wound healing in the patent disclosure. Rather, Fox specifically states that his invention relates to bandage assemblies “for phonophoresis of medicaments” (column 1, lines 44-45) and that an object of the invention is “to provide a novel bandage assembly using piezoelectric polymers for percutaneous administration of medicaments” (column 1, lines 66-68). Fox does not expressly teach the use of his piezoelectric bandage assembly for wound healing or teach placement of his bandage substantially adjacent a wound, as called for in claim 8.

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). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). In that Fox lacks a

teaching, either expressly or under principles of inherency², of steps of positioning the piezoelectric bandage substantially adjacent to a wound and emitting ultrasound toward the wound and away from the wound to contact and heal the wound, as called for in claim 8, the examiner's rejection of claim 8 as being anticipated by Fox cannot be sustained.

The obviousness rejections

Each of dependent claims 3, 11 and 13, as well as claims 4-7 which depend from claim 3 and 14-17 which depend from claim 13, requires that the transducer include a rod-shaped operative surface, which is clearly lacking in Fox. Relying on the teachings of either Watanabe or Crowley, however, the examiner contends that it would have been obvious to have modified Fox such that a rod-shaped transducer is used to cover a wider area for treatment in a single application (answer, page 3). For the reasons which follow, we do not agree.

Watanabe is directed to an ultrasonic apparatus for health and beauty which makes use of a roller 7 having ultrasonic vibrations transmitted thereto via a plate-like vibrator 9 driven by a high-frequency generating unit 4 to "obtain the synergistic effect

² Under principles of inherency, when a reference is silent about an asserted inherent characteristic, it must be clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). In this case, we disagree with the examiner that Fox's use of the term "bandage" conveys that it is necessarily used to treat a wound. We share appellants' view (brief, page 7) that Fox uses the term "bandage" to describe its structure, namely, a strip for adherence to the skin, rather than a function of treating a wound.

derived from a micro-massaging effect based on ultrasonic vibrations and a massaging effect based on the rolling of a roller” (column 1, lines 60-63). It is not apparent to us why one of ordinary skill in the art would have found any incentive to use a roller-shaped ultrasonic transducer as taught by Watanabe in the bandage of Fox, as the object of the Fox bandage is to secure the transducer to the patient’s skin, while the advantage of the ultrasonic roller taught by Watanabe is derived from rolling the ultrasonic roller along the person’s skin to obtain the synergistic effect of massaging from ultrasonic vibration and massaging from rolling. As for the examiner’s stated motivation “to cover a wider area for treatment in a single application,” neither Fox nor Watanabe provides support for any such advantage.

Likewise, even assuming that Crowley discloses a rod-shaped transducer assembly, a point which appellants do not contest, we find no suggestion in the teachings of Crowley of an acoustic tissue ablation catheter to modify the shape of the ultrasonic transducer of Fox, which is used for percutaneous administration of a medicament, not ablation of tissue. As for the examiner’s stated motivation “to cover a wider area for treatment in a single application,” neither Fox nor Crowley provides support for any such advantage.

For the foregoing reasons, we shall not sustain the examiner’s rejections of claims 3-7, 11 and 13-17 as being unpatentable over either Fox in view of Watanabe or Fox in view of Crowley.

REMAND TO THE EXAMINER

While, for the reasons discussed above, we do not find the teachings of Fox sufficient to establish an anticipation of the subject matter of claim 8, we remand this application to the examiner to consider whether the teachings of Fox, in combination with official notice regarding the use of bandages and medicaments in wound treatment at the time of appellants' invention, would have been suggestive of the subject matter of claim 8, so as to establish a prima facie case of obviousness thereof under 35 U.S.C. § 103(a). In particular, Fox teaches a method of fastening an ultrasonic transducer to the exterior surface of a patient's skin and emitting ultrasound from the operative surface of the transducer toward the skin to drive medicament into the pores of the skin. Fox also teaches that the use of ultrasonics in wound healing was well known in the art at the time of appellants' invention. Further, the application of adhesive bandages and medicaments, such as anti-septic ointments, on open wounds to aid in the healing thereof was so well established at the time of appellants' invention that official notice can be taken thereof.³ The examiner should consider whether it would have been obvious, in light of the above, to one of ordinary skill in the art to fasten Fox's bandage on a patient's skin adjacent a wound and emit ultrasound from the transducers thereof

³ See In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970); In re Malcolm, 129 F.2d 529, 54 USPQ 235 (CCPA 1942).

to drive medicament, such as an anti-septic, into the wound to aid in the healing thereof and whether such a method would inherently meet the limitations of claim 8.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 8 and 12 under 35 U.S.C. § 102(b) is affirmed as to claims 1 and 12 and reversed as to claim 8. The examiner's decision to reject claims 3-7, 11 and 13-17 under 35 U.S.C. § 103(a) is reversed. The application is remanded to the examiner for the reason noted above.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a remand pursuant to 37 CFR § 1.196(e).

37 CFR § 1.196(e) provides that

Whenever a decision of the Board of Patent Appeals and Interferences includes or allows a remand, that decision shall not be considered a final decision. When appropriate, upon conclusion of proceedings on remand before the examiner, the Board of Patent Appeals and Interferences may enter an order otherwise making its decision final.

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

The effective date of the affirmance is deferred until conclusion of the proceedings before the examiner unless, as a mere incident to the limited proceedings, the affirmed rejection is overcome. If the proceedings before the examiner do not result

in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejections, including any timely request for rehearing thereof.

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; REMANDED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
NEAL E. ABRAMS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
JENNIFER D. BAHR)	
Administrative Patent Judge)	

Appeal No. 2002-0910
Application No. 09/229,855

Page 12

CHIEF PATENT COUNSEL
SMITH & NEPHEW, INC.
1450 BROOKS ROAD
MEMPHIS, TN 38116

JDB:caw