

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 47

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM ELKINS

Appeal No. 2001-1418
Application 08/022,822

ON BRIEF

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

DECISION ON APPEAL

William Elkins originally took this appeal from the final rejection of claims 30 through 35, 39 through 41, 51 and 52.¹ As the examiner has since withdrawn the rejections of claims 30 through 35, which now stand allowed, the appeal as to these

¹ The record is unclear as to whether the amendment of claim 52 (see Paper No. 36) submitted subsequent to final rejection has been entered. Although the advisory action mailed October 19, 1999 (Paper No. 37) indicates that the amendment is not entered, the proposed change has in fact been effected. This discrepancy should be resolved upon return of the application to the technology center.

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claims is hereby dismissed. Claims 39 through 41, 51 and 52 remain on appeal. Claims 36 through 38 and 42 through 50, the only other claims pending in the application, stand withdrawn from consideration pursuant to 37 CFR § 1.142(b).

THE INVENTION

The subject matter on appeal relates to "a patient therapy heat exchange structure for placing against or for being worn on the human body" (specification, page 1). Representative claims 39 and 51 read as follows:

39. A flexible heat exchange structure having a pair of superposed sheets of flexible material sealed together to form a plurality of fluid-conducting channels which tend to inflate and decrease in width when a pressurized liquid passes through them, and a manifold in fluid communication with the channels at one end thereof which also tends to be inflated by the pressurized liquid, the manifold having an undulating wall which is oriented and dimensioned to decrease in dimension to the same degree that the width of the channels decreases upon pressurization of the structure.

51. A flexible heat exchange structure having a pair of superposed sheets of flexible material sealed together in a plurality of spaced apart discrete areas to form a fluid-conducting channel which inflates and decreases in lateral dimension upon pressurization by a fluid, and means sealing the sheets together along an undulating line to form a chamber which communicates with the channel and also inflates and decreases in lateral dimension upon pressurization, the undulating line being oriented and dimensioned to make the decreases in lateral dimension substantially equal in the channel and in the chamber.

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THE REJECTIONS

Claims 39 through 41, 51 and 52 stand rejected under 35 U.S.C. § 112, first paragraph.

Claims 39, 41, 51 and 52 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,149,541 to Gammons et al. (Gammons).

Attention is directed to the appellant's main and reply briefs (Paper Nos. 41 and 43) and to the examiner's answer (Paper No. 42) for the respective positions of the appellant and the examiner with regard to the merits of these rejections.

DISCUSSION

I. The 35 U.S.C. § 112, first paragraph, rejection

This rejection rests on the following analysis by the examiner:

[t]he originally filed specification does not disclose how to effect the device claimed in claims 39 and 51. With regard to claim 39, there is no disclosure as to how to construct the device such that the manifold has an undulating wall which is oriented and dimensioned to decrease in dimension to the same degree that the width of the channels decreases upon pressurization of the structure. With regard to claim 51, there is no disclosure as to how to construct the device such that it has an undulating line to form a chamber which communicates with the channel, and also inflates and decreases in lateral dimension upon pressurization, the undulating line being oriented and dimensioned to make the decreases in lateral dimension substantially equal in the channel and in the chamber.

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Moreover, the originally filed disclosure does not disclose a device comprising these new limitations. The only device described in the originally filed disclosure comprised a manifold having apices wherein the distance between the apices decreases to the same degree as the width of the flow channels upon pressurization of the device [answer, pages 3 and 4].

Based on the foregoing, it appears that the examiner considers the appellant's specification to be lacking with respect to both the enablement and written description requirements of § 112, first paragraph. These two requirements are, of course, separate and distinct. Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991).

Insofar as enablement is concerned, the dispositive issue is whether the appellant's disclosure, considering the level of ordinary skill in the art as of the date of the appellant's application, would have enabled a person of such skill to make and use the appellant's invention without undue experimentation. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563-64 (CCPA 1982). In calling into question the enablement of the appellant's disclosure, the examiner has the initial burden of advancing acceptable reasoning inconsistent with enablement. Id.

In the present case, the paragraph bridging pages 6 and 7 in the appellant's original specification sets forth in general terms that "the undulations each [have] a width which is selected to shrink, upon pressurization of the heat exchange structure with fluid, to the same degree that the liquid conducting channels on the other side of the manifold shrink in width." Pages 16 and 17 in the original specification describe in considerable detail an example of this construction. The examiner has not cogently explained, nor is it apparent, why such disclosure of what is relatively simple and straightforward subject matter would not have enabled a person of ordinary skill in the art to make and use the heat exchange structures respectively recited in claims 39 and 51, i.e., a structure having "an undulating wall which is oriented and dimensioned to decrease in dimension to the same degree that the width of the channels decreases upon pressurization of the structure" (claim 39), and a structure having "an undulating line [forming] a chamber which communicates with the channel and also inflates and decreases in lateral dimension upon pressurization, the undulating line being oriented and dimensioned to make the decreases in lateral dimension substantially equal in the channel

and in the chamber" (claim 51). Although the foregoing claim language does not have literal support in the underlying

specification, one of ordinary skill in the art would have readily appreciated the above noted portions of the specification as being descriptive of, and enabling with respect to, a heat exchange structure having the undulating wall defined in claim 39 and the undulating line and chamber defined in claim 51.²

As for the written description requirement, the test is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983).

For the reasons discussed above in conjunction with the enablement issue, the disclosure of the appellant's application as originally filed would reasonably convey to the artisan that the appellant had possession at that time of the subject matter

² The appellant is advised, however, that 37 CFR § 1.75(d)(1) requires in pertinent part that "the terms and phrases used in the claims must find clear support or antecedent basis in the description."

now recited in claims 39 and 51, notwithstanding the lack of literal support in the specification for some of the language employed in these claims.

Hence, the examiner's concern that the appellant's specification fails to comply with the enablement and written description requirements with respect to the subject matter recited in claims independent 39 and 51 is unfounded. Accordingly, we shall not sustain the standing 35 U.S.C. § 112, first paragraph, rejection of claims 39 and 51, and dependent claims 40, 41 and 52.

II. The 35 U.S.C. § 102(b) rejection

Gammons discloses a fluid circulation pad used to treat muscle injury, surgical wounds and the like. In Gammons' words,

FIG. 1 shows a patient treatment pad 1 which is formed by a pair of flexible thermoplastic panels sealed together about a peripheral seal 2 to define a sealed internal chamber with an inlet port 3 connected to an inlet tube 4. An outlet port 5 is sealed to an outlet tube 6. Inlet tube 4 and outlet tube 6 have connectors 7 and 8 connected to their respective ends. A circulating pump (not shown) can join to connectors 7 and 8.

The fluid circulating pad is segregated into a series of fields 9, 10, 11 and 12 by partitions such as 13 and 14. It is preferable to have the major fields connected in series, such as in serpentine fashion as shown in FIG. 1. Thus as liquid enters inlet tube 4, it is forced to flow in a serpentine manner as shown by dotted line 15. . . .

Within each partitioned field of the pad are a series of intersecting passages with portions having

generally parallel sides to create a waffle like grid pattern with rectangular or diamond shaped sealed portions between the passages. In the enlarged section of FIG. 4, the passages are indicated as 20 and 21 that intersect at 23. A rectangular sealed section 24 seals the two thermoplastic panels of the pad together.

. . . .
The waffle grid pattern allows the circulating liquid to flow in several different directions. Thus, if a crease in the folded pad should block off one particular passage, such as 20, liquid can detour around crimped passage 20 and still flow through the serpentine series connected fields. Thus, the partitioning system between the fields provide[s] major directional guidance for the liquid, while the waffle grid pattern within each field provides a random circulation within the field as liquid flows from an inlet of the field to an outlet of the field [column 2, lines 25 through 65].

Anticipation is established only when a single prior art reference discloses, expressly or under 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). It is not necessary 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

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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).

The examiner considers the subject matter recited in independent claims 39 and 51 to be anticipated by Gammons because

[t]he perimeter of Gammons' heat exchange structure is formed by a channel having V-shaped convolutions which face inward towards the cross-flow channels of the structure. This portion of the structure is considered the manifold. The width of the channel with these V-shaped convolutions is the same as that of the cross-flow channels as can be seen in Figs. 1 and 4. Therefore, inherently, the width of this channel will shrink to the same degree as the width of the cross flow channels when the device is inflated [answer, page 4].

This position is unsound for a number of reasons.

To begin with, while a person of ordinary skill in the art arguably would view the waffle-like grid pattern of the Gammons' pad as encompassing a plurality of fluid-conducting channels, such person would not view this pattern as embodying a manifold in fluid communication with the channels at one end thereof as recited in claim 39. The examiner's finding that the portion of the waffle-like pattern adjacent the peripheral seal 2 constitutes a manifold is arbitrary and capricious and has no factual support in the Gammons disclosure.

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In addition, the examiner's determination that the Gammons pad is structured such that it would inherently meet the recitations in claim 39 of "an undulating wall which is oriented and dimensioned to decrease in dimension to the same degree that the width of the channels decreases upon pressurization of the structure," and in claim 51 of "an undulating line [forming] a chamber which communicates with the channel and also inflates and decreases in lateral dimension upon pressurization, the undulating line being oriented and dimensioned to make the decreases in lateral dimension substantially equal in the channel and in the chamber" is unduly speculative given the lack of any relevant teaching in the reference on this matter.

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). As the court stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a

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certain thing *may* result from a given set of circumstances is not sufficient. [Citations omitted.] If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Gammons simply does not pass muster under these principles with regard to the inherency issues at hand.

Therefore, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of claims 39 and 51, and dependent claims 41 and 52, as being anticipated by Gammons.

SUMMARY

The decision of the examiner to reject claims 39 through 41, 51 and 52 is reversed.

REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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LAWRENCE J. STAAB)	
Administrative Patent Judge)	INTERFERENCES
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JOHN P. MCQUADE
Administrative Patent Judge

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