

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BMC MEDICAL CO. LTD., 3B PRODUCTS, L.L.C., and
3B MEDICAL INC.,

Petitioner,

v.

RESMED LIMITED,
Patent Owner.

Case IPR2014-01196
Patent RE44,453 E

Before MEREDITH C. PETRAVICK, SCOTT E. KAMHOLZ, and
BARRY L. GROSSMAN, *Administrative Patent Judges*.

KAMHOLZ, *Administrative Patent Judge*.

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

BMC Medical Co. Ltd., 3B Products, L.L.C., and 3B Medical Inc. (collectively “Petitioner”) filed a Petition (Paper 2, “Pet.”), requesting institution of an *inter partes* review of claims 1–7 of U.S. Patent No. RE 44,453 E (Ex. 1001, “the ’453 patent”). ResMed Limited (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314.

We institute *inter partes* review because we determine that the information presented in the Petition and in the Preliminary Response shows that there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition. *See* 35 U.S.C. § 314(a). In particular, we institute *inter partes* review with respect to claims 1–7.

II. DISCUSSION

A. *The ’453 Patent*

The ’453 patent relates to a humidifier for use with a continuous positive airway pressure (CPAP) device. Ex. 1001, 1:25–28. As the ’453 patent explains, humidification of air delivered to CPAP patients may increase comfort. *Id.* at 1:31–33.

The challenged claims are reproduced below (brackets and italics indicate, respectively, text removed and added from the claims upon reissuance):

1. A humidifier assembly for a CPAP apparatus, comprising
a humidifier including
a base configured to retain a body of liquid therein, at least a portion of the base

being constructed of a heat conducting material,
a top cover, and
a seal disposed between the top cover and the base; and
a connecting structure configured to connect between the CPAP apparatus and humidifier and allow communication of an outlet of the CPAP apparatus with [the] *an* inlet of the humidifier, the connecting structure including
a housing providing a base portion to support the humidifier thereon, and
a retaining mechanism configured to secure the connecting structure to the CPAP apparatus,
wherein the base portion includes a heating element in contact with the heat conducting material of the base of the humidifier.

2. A humidifier assembly according to claim 1, wherein the top cover defines both an inlet and an outlet communicated with an interior of the base, the inlet configured to receive pressurized breathable gas and the outlet configured to deliver the pressurized breathable gas with added humidity.

3. A humidifier assembly according to claim 1, wherein the connecting structure includes a control knob to control a heat setting of the heating element.

4. A humidifier assembly according to claim 1, wherein the connecting structure includes contact elements that communicate with a power supply within the CPAP apparatus.

5. A humidifier assembly according to claim 1, wherein the connecting structure is configured to allow removable attachment of the CPAP apparatus to the humidifier.

6. A humidifier assembly according to claim 1, wherein the heat conducting material is a metallic material.

7. A CPAP apparatus including a humidifier assembly according to claim 1.

B. Challenges

Petitioner challenges the claims as follows:

Reference	Basis	Claims Challenged
Schätzl ¹	§ 102	1 and 4–7
Schätzl and Daniell ²	§ 103	3
REMstar Manual ³	§ 102	1, 2, 4, 5, and 7
REMstar Manual and Daniell	§ 103	3
REMstar Manual and Schätzl	§ 103	6
Prime, ⁴ Schätzl, and Dobson ⁵	§ 103	1 and 2

¹ German Pub. No. DE 199 36 499 A1, pub. Feb. 8, 2001 (Ex. 1002).

² U.S. Pat. No. 6,050,260, iss. Apr. 18, 2000 (Ex. 1017).

³ Instruction Manual for REMstar® Heated Humidifier, Respironics Inc. (Ex. 1003).

⁴ PCT Publication No. WO 00/21602, pub. Apr. 20, 2000 (Ex. 1018).

⁵ U.S. Pat. No. 5,673,687, iss. Oct. 7, 1997 (Ex. 1019).

Petitioner also relies upon Declaration testimony of Mr. Steve Bordewick in support of its challenges. Mr. Bordewick's Declaration is provided as Exhibit 1004.

C. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

We determine that no express claim construction is necessary for this decision.

D. Anticipation of Claims 1 and 4–7 by Schätzl

Schätzl discloses a humidifier for a CPAP device. Ex. 1002, 1:3–6. According to Petitioner, Schätzl's "tub element 1" corresponds to the claimed base, "pot part 2" corresponds to the claimed top cover, and "seal structure 6" corresponds to the claimed seal disposed between the base and top cover. Pet. 15–16. Also according to Petitioner, Schätzl's mountable housing 4 corresponds to the claimed connecting structure, including a base that supports the mountable housing 4, heating device 14, and fastening appliance 20. *Id.* at 16–17. Petitioner asserts that fastening appliance 20 couples the humidifier to the CPAP apparatus and corresponds to the claimed retaining mechanism. *Id.* Petitioner also argues that tub element 1

is disclosed as having heat-conducting material in its bottom area 15 that is in contact with heating device 14. *Id.* at 17 (citing Ex. 1002, 5:13–21).

Patent Owner does not direct any arguments to this challenge.

Upon consideration of the arguments and evidence presented in the Petition, we determine that Petitioner has demonstrated a reasonable likelihood that claim 1 is unpatentable for anticipation by Schätzl. We also have considered Petitioner’s arguments and evidence relating to dependent claims 4–7, and are persuaded of a reasonable likelihood that these claims are unpatentable for anticipation by Schätzl as well.

E. Obviousness of Claim 3 Over Schätzl and Daniell

Petitioner argues that Schätzl discloses switching means 27 for controlling heating of water in the humidifier. Pet. 20. Petitioner argues further that Daniell discloses a humidified CPAP system in which a dial controls heating of a heater plate to heat water in a humidification chamber. Pet. 21. According to Petitioner, the substitution of Daniell’s control knob for Schätzl’s switching means would have been an obvious design choice to provide patients with easy temperature control. *Id.* (citing Ex. 1004 ¶ 52).

Patent Owner does not direct any arguments to this challenge.

Upon consideration of the arguments and evidence presented in the Petition, we determine that Petitioner has demonstrated a reasonable likelihood that claim 3 is unpatentable for obviousness over Schätzl and Daniell.

F. Anticipation of Claims 1, 2, 4, 5, and 7 by REMstar Manual

The REMStar Manual is alleged by Petitioner to be an instruction manual that accompanied a product marketed by Respiration Inc. (a non-

party to this case) in 2001. The only evidence Petitioner puts forward to show that the Manual was published prior to the effective filing date of the application on which the '453 patent issued is the inscription "LK 3/15/01," which appears at the lower-right corner of the last page of the Manual. Pet. 23 (citing Ex. 1003, 8).

Patent Owner argues that the "LK 3/15/01" inscription does not necessarily indicate a publication date. Prelim. Resp. 18.

We agree with Patent Owner that Petitioner has provided insufficient evidence that the REMstar Manual was published on March 15, 2001. Challenges in *inter partes* review may be brought "only on the basis of prior art consisting of patents or printed publications." 35 U.S.C. § 311(b). Petitioner fails to provide any credible evidence that the inscription "LK 3/15/01" indicates that the document was published on March 15, 2001, or otherwise qualifies as a prior-art printed publication.⁶

⁶ Although Petitioner does not cite this evidence, Mr. Bordewick states in his Declaration that "[t]he REMstar Manual ('*Manual*') was published on March 15, 2001." Ex. 1004 ¶ 53. Mr. Bordewick's testimony on this issue is given no weight, because Petitioner does not cite it in the Petition. We also give the testimony no weight because Mr. Bordewick is serving as an expert witness in mechanical engineering, not as a fact witness (*see* Ex. 1004 ¶¶ 1, 22), so any factual assertions Mr. Bordewick makes about when the Manual was published are beyond the scope of his role in this proceeding. To the extent Mr. Bordewick's testimony concerning publication is expert testimony, he does not provide any facts, data, or analysis to explain the basis for his statement, so his assertion is entitled to little or no weight. *See* 37 C.F.R. § 42.65(a).

For this reason, we determine that Petitioner has not demonstrated a reasonable likelihood that claims 1, 2, 4, 5, and 7 are unpatentable for anticipation by the REMstar Manual.

G. Obviousness of Claim 3 Over REMstar Manual and Daniell

We determine that Petitioner has not demonstrated a reasonable likelihood that claim 3 is unpatentable for obviousness over the REMstar Manual and Daniell for the reason given in section II.F.

H. Obviousness of Claim 6 Over REMstar Manual and Schätzl

We determine that Petitioner has not demonstrated a reasonable likelihood that claim 6 is unpatentable for obviousness over the REMstar Manual and Schätzl for the reason given in section II.F.

I. Obviousness of Claims 1 and 2 Over Prime, Schätzl, and Dobson

Petitioner argues that Prime (Ex. 1018, WO 00/21602) discloses all limitations of claim 1 except the connecting structure. Pet. 42. In particular, Petitioner argues that Prime's "base 3" corresponds to the claimed base, "dome 2" corresponds to the claimed top cover, and "adhesive means or glue 12" corresponds to the claimed seal disposed between the base and top cover. *Id.* at 47–49. Petitioner argues that, to the extent Prime does not disclose the claimed connecting structure, Schätzl discloses this structure. *Id.* at 49–50. Petitioner argues that a rationale for combining Prime's humidifier with Schätzl's connecting structure is provided by Dobson, which describes the undesirability of connecting a home-use humidifier to a ventilator using a flexible hose, due to the risk of mishandling and to the extra cleaning burden. *Id.* at 50.

As to claim 2, Petitioner argues that Prime's inlet 4 and outlet 5 are defined by dome 2 and communicate with the interior of base 3. *Id.* at 51.

Patent Owner does not direct any arguments to this challenge.

Upon consideration of the arguments and evidence presented in the Petition, we determine that Petitioner has demonstrated a reasonable likelihood that claims 1 and 2 are unpatentable for obviousness over Prime, Schätzl, and Dobson.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated that there is a reasonable likelihood of its proving unpatentability of claims 1–7 of the '453 patent.

The Board has not made a final determination on the patentability of the challenged claims.

IV. ORDER

Accordingly, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1–7 of U.S. Patent No. RE 44,453 E on the following grounds of unpatentability:

- A. Anticipation of Claims 1 and 4–7 by Schätzl;
- B. Obviousness of Claim 3 Over Schätzl and Daniell; and
- C. Obviousness of Claims 1 and 2 Over Prime, Schätzl, and Dobson;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, the trial commencing on the entry date of this decision; and

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FURTHER ORDERED that the trial is limited to the grounds identified above, and no other grounds are authorized.

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