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| MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 | | | MANAHAN, TODDE | |
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ERIK SOMMER

Appeal 2010-001103
Application 10/182,748
Technology Center 3700

Before LINDA E. HORNER, TIMOTHY J. O'HEARN, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Erik Sommer (Appellant) seeks our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1 and 3-9 under 35 U.S.C. § 103(a) as being unpatentable over Bono (US 5,611,332; iss. Mar. 18, 1997) and Barthlott (WO 96/04123; pub. Feb. 15, 1996). We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

THE INVENTION

Appellant's claimed invention relates to inhalation nebulizers having a liquid reservoir. Spec. 1. Claim 1, reproduced below, is the sole independent claim and is representative of the subject matter on appeal.

1. An inhalation nebulizer having a liquid reservoir for a therapeutically effective or medicament-containing liquid to be nebulized, wherein a surface of the liquid reservoir facing the liquid has a surface structure comprising protrusions having a distance there between in the range of from 1 to 200 μm and a height in the range of from 1 to 100 μm , with at least the protrusions comprising hydrophobic materials or permanently hydrophobized materials, and wherein the protrusions are not removable by the liquid, by water or by water with detergents.

ISSUE

The Examiner relied on Bono to disclose a nebulizer having a liquid reservoir and for the teaching of using a hydrophobic polymer material on a rain-off chamber to cause condensed drug solution to fall back into the nebulizer reservoir. Ans. 4. The Examiner relied on Barthlott to disclose that it was known to use a surface of protrusions of hydrophobic material having the spacing and height called for in claim 1 as a water-repellant surface. *Id.* The Examiner determined that it would have been obvious “[t]o have placed the [hydrophobic surface of protrusions] on all internal walls of Bono[’s] device, including those of the parabolic walls of the reservoir . . . because it would allow or cause the condensate to run down the walls and into the bottom of the reservoir and pool there to allow for total nebulization of the solution.” *Id.* See also Ans. 7-9.

Appellant argues the combined teachings of Bono and Barthlott would result in “a rain-off chamber having protrusions” and that “it would not be obvious to place hydrophobic surfaces on the reservoir (12) because the function of the hydrophobic surfaces of chamber (30) does not correlate to the function of the reservoir (12) surfaces.” Br. 18, 20.

The issue presented by this appeal is whether the Examiner has articulated adequate reasoning based on rational underpinnings to explain why one of ordinary skill in the art would have been led to place a hydrophobic surface of protrusions on a nebulizer reservoir based on the combined teachings of Bono and Barthlott.

ANALYSIS

We do not find adequate evidence in the record to support the Examiner’s position that one of ordinary skill in the art would have recognized an advantage to be gained from adding a hydrophobic surface with protrusions to the nebulizer reservoir of Bono. We find equally plausible Appellant’s position that one of ordinary skill in art would have determined that the parabolic walls of Bono’s nebulizer reservoir would provide sufficient drainage due to gravity and the surface tension of the drops in the reservoir. Br. 21. While Bono discloses an advantage to using a hydrophobic surface in the rain-off chamber, it does not disclose any portion of the nebulizer having a hydrophobic surface. Br. 18. We find inadequate evidence in the record that one of ordinary skill in the art would have had a reason to modify the surfaces of the nebulizer reservoir of Bono as proposed by the Examiner. As such, we do not sustain the rejection of

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claims 1 and 3-9 under 35 U.S.C. § 103(a) as being unpatentable over Bono and Barthlott.

CONCLUSION

The Examiner has not articulated adequate reasoning based on rational underpinnings to explain why one of ordinary skill in the art would have been led to place a hydrophobic surface of protrusions on a nebulizer reservoir based on the combined teachings of Bono and Barthlott.

DECISION

The decision of the Examiner to reject claims 1 and 3-9 is REVERSED.

REVERSED

MP