

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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIK KRAHBICHLER and TOM PESSALA

Appeal No. 2000-0188
Application No. 08/900,720

HEARD: January 22, 2002

Before RUGGIERO, DIXON, and LEVY, **Administrative Patent Judges**.
DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-5, 8 and 9. Claims 6, 7 and 13-17 are withdrawn from consideration due to an election of species requirement and dependent claims 10-12 have been indicated by the examiner to be directed to allowable subject matter.

We REVERSE.

BACKGROUND

Appellants' invention relates to a device for identifying liquid anaesthetics using the refractive index and temperature of liquid anaesthetic to determine the identity. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A device for use with an anaesthetic administration apparatus for identifying at least one liquid anaesthetic in said anaesthetic administration apparatus, said device comprising:

means for determining at least one parameter related to a refractive index of a liquid anaesthetic to be identified;

means for determining a temperature of said liquid anaesthetic to be identified; and

analysis means for identifying said liquid anaesthetic to be identified from said at least one parameter at said temperature.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Shaw et al. (Shaw)	3,282,149	Nov. 01, 1966
Harmer	4,433,913	Feb. 28, 1984
Bobb et al. (Bobb)	4,981,338	Jan. 01, 1991
Lekholm	5,730,119	Mar. 24, 1998
		(filed Jan. 05, 1996)

Claims 1-4, 8 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bobb in view of Harmer and Lekholm. Claim 5 stands rejected under 35 U.S.C. §

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103 as being unpatentable over Bobb in view of Harmer and Lekholm further in view of Shaw.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 13, mailed Jun. 22, 1999) for the examiner's reasoning in support of the rejections, and to appellants' brief (Paper No. 12, filed April 12, 1999) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Appellants argue that the Bobb reference does not employ temperature in determining the identity of a liquid using refractive index. (See brief at page 14.) We agree with appellants. Appellants argue that the refractometer of Bobb can only determine indices of refraction in the range of 1.33 to 1.62. (See brief at page 15 and Bobb at column 3.) Appellants argue that it is doubtful that the refractometer of Bobb is capable of determining the refractive index of commonly employed anaesthetics and

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provides a chart indicating that the indices range from 1.256 to 1.368. (See brief at pages 15-16.) Based on these figures, only two of the five would be identifiable.

Appellants argue that therefore, skilled artisans would not have been motivated to use the refractometer of Bobb to identify liquid anaesthetics. The examiner maintains that “[t]his is clearly not the case” and relies on Figure 6 of Bobb which shows curves of three liquids and air plotting relative intensity verses degrees off-axis. (See answer at page 6.) The examiner maintains that the “limited range” is for only the liquids studied by Bobb. (**Id.**)

The examiner maintains that Bobb is useful down to indices as low as 1. (**Id.**) We disagree with the examiner’s conclusion since Bobb expressly states that the sensitivity of the system is improved from the range of 1.33 to 1.5 (Bobb at col. 5) to the range of 1.33 to 1.60 for a highly sensitive refractometer system (Bobb at col. 6). While Bobb includes curves for air ($n=1.0$) with the liquids in Figure 6, Bobb does not expressly teach or suggest that the refractometer system is sensitive below a refractive index of 1.33.

Therefore, we disagree with the examiner.

The examiner maintains that Harmer compensates for temperature and cites Harmer at column 5, lines 19-30 to support this position. (See answer at page 6.)

Appellants argue that Harmer teaches that the refractometer of Harmer automatically corrects for temperature without determination of an actual temperature. (See brief at

pages 16-17.) The examiner retorts that Harmer does not use feedback, but chooses an LED with a temperature coefficient that compensates the changes in refractive index with temperature. (See answer at page 6.) The examiner concludes that “Harmer can make a temperature measurement by inverting the equation at Col. 5, Li[ne] 23 of column 5. While we agree that the temperature “can” be measured or determined, Harmer does not specifically determine the temperature, but merely compensates for its variations, and we agree with appellants.

Appellants argue that even if Lekholm teaches a general motivation to identify anaesthetics, neither Bobb nor Harmer provides any specific teaching to motivate a skilled artisan to arrive at the invention as recited in claim 1 using refractive index and temperature to identify anaesthetics. We agree with appellants. The examiner relies on the teachings of Bobb as teaching the “entire theory that enables one of ordinary skill to implement the invention.” (See answer at page 6.) We disagree with the examiner. The examiner further relies upon the teaching in the abstract of Lekholm to provide the sufficient motivation. (See answer at pages 4 and 6.) From our review of Lekholm, Lekholm uses temperature to identify anaesthetics and provides a general motivation to identify anaesthetics, but we find no motivation in any of the references to combine the separate teachings nor a convincing line of reasoning by the examiner to

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combine the teachings to achieve the invention as recited in independent claim 1.

Therefore, we will not sustain the rejection of independent claim 1 and its dependent claims 2-5, 8 and 9.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-5, 8 and 9 under 35 U.S.C. § 103 is reversed.

REVERSED

JOSEPH F. RUGGIERO)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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