

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVE J. LACKIE

Appeal No. 1996-3504
Application No. 08/265,648

ON BRIEF

Before KIMLIN, GARRIS, and PAK, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's refusal to allow claims 1 through 5 and 32 through 36 as amended subsequent to the final Office action dated June 13, 1995. The examiner has withdrawn the rejection of claims 21 through 23 and

25 through 27 subsequent to this appeal.¹ See Answer, pages 1 and 3.

Claims 1 and 5 are representative of the subject matter on appeal and read as follows:

1. An apparatus comprising, in combination:

light-transparent conduit means for allowing fluid flow of a fluid sample therethrough;

and

a porous mass of light-transparent material disposed in said conduit means, the porosity of said mass being selected to permit fluid flow of said fluid flow of said fluid sample therethrough, said mass having immobilized thereon at least a moiety of a ligand/conjugate complex, said mass being arranged and constructed such that said at least a moiety is localized within only a portion of said conduit means; and

measuring means positioned relative to said portion of said conduit means so that said measuring means quantitatively measures an amount of radiation emanating from within said portion of said conduit means.

5. An apparatus comprising, in combination:

focusing optical lens means; and

¹ At page 3 of the Answer, the examiner inadvertently states that "[t]he rejection of claims 21-27 has been withdrawn." As is apparent from the Amendment dated August 7, 1995, Paper No. 12, claim 24 was canceled. We find, however, that the examiner has correctly withdrawn the rejection of 21-23 and 25-27 at page 1 of the Answer.

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a conduit means of substantially uniform cross-sectional dimension disposed within said lens means for fluid flow of a fluid sample therethrough, and extending transversely to an optical axis of said lens means through a focal region of said lens means, said apparatus being arranged and constructed such that said lens means focuses light rays that emanate from within said conduit means said lens means focussing said light rays by refraction.

As evidence of obviousness, the examiner relies on the following prior art:

Leif 7, 1982	4,348,107	Sep.
Bauman et al. (Bauman) 1984	4,425,438	Jan. 10,
Schrader 1987	4,714,345	Dec. 22,

The appealed claims stand rejected as follows:

- (1) Claims 1 through 3 and 32 through 34 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Bauman;
- (2) Claims 4 and 36 under 35 U.S.C. § 103 as unpatentable over the disclosure of Bauman; and
- (3) Claims 5 and 35 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Lief and Schrader.

We reverse each of the foregoing rejections. Our reasons for this determination follow.

The initial inquiry into determining the propriety of the examiner's prior art rejections is to correctly construe the

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scope and meaning of the claimed subject matter. ***Gechter v. Davidson***, 116 F.3d 1454, 1457, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997); ***In re Paulsen***, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Generally, we give the broadest reasonable interpretation to the terms in claims consistent with appellants' specification. ***In re Morris***, 127 F.3d 1048, 1053-54, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). When the terms in the claims are written in a "means-plus-function" format, however, we interpret them as the corresponding structure shown in the specification or equivalents thereof consistent with 35 U.S.C. § 112, paragraph 6. ***In re Donaldson***, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994). The manner in which a "means-plus-function" element is expressed, either by a function followed by the term "means" or by the term "means for" followed by a function, is unimportant so long as the modifier of that term specifies a function to be performed. ***Ex parte Klumb***, 159 USPQ 694, 695 (Bd. App. 1967). According to ***Al-Site Corp. v. VSI International Inc.***, 174 F.3d 1308, 1313, 50 USPQ2d 1161, 1166 (Fed. Cir. 1999),

if the word "means" appears in a claim element in combination with a function, it is presumed to be a

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means-plus-function element to which § 112, ¶ 6 applies Nevertheless according to its express terms, § 112, ¶ 6 governs only claim elements that do not recite sufficient structural limitations. **See also *Unidynamics Corp. v. Automatic Products International Ltd.***, 157 F.3d 1311, 1319, 48 USPQ2d 1099, 1104-1105 (Fed. Cir. 1998).

Claim construction is a question of law that we review **de novo**.

Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456, 46 USPQ2d

1169, 1174 (Fed. Cir. 1998)(***in banc***).

Applying the above statutory interpretation to the present case, we determine that the terms "measuring means" and "focussing optical lens means" recited in claims 1, 4, 5 and 35 are mean-plus-function elements to which § 112, ¶ 6, applies. Nowhere do claims 1, 4, 5 and 35 recite sufficient structural limitations for the above means. Thus, we look to the specification for the structure corresponding to "measuring means" and "focussing optical lens means" and equivalents thereof to determine the scope and meaning of claims 1, 4, 5 and 35, the broadest claims in this application.

We interpret the claimed "measuring means" as the specific arrangement of optical devices illustrated in Figure 1 and described at page 4, lines 22 to 26 and page 7, lines 17 to 25, of the specification, which is provided below for convenience:

In Fig. 1 there is shown exemplary apparatus 20 for assaying a fluid sample and which may typically employ an optical system including light source 22 for providing excitation radiation, light detector 24 for detecting light stimulated by the excitation radiation, beam splitter means such as dichroic or semitransparent mirror 26 and collimator means 28.

. . . .

. . . Light source 22 is then activated to generate excitation light beam 23 (shown in broken lines) which, in turn is directed to mirror 26 by collimating lens 28 so that the collimated beam is reflected onto lens means 32. The latter focusses the excitation beam to a focal region at which the mass of beads 40 in reaction chamber 36 is located, and the excitation radiation excites the fluorescence on beads 40 into fluorescence. That fluorescence is transmitted through lens 32 and directed through beam splitter mirror 26 to detector 24. After measurements are made, the mass of beads 40 can be readily removed from reaction chamber 36 simply by back-flushing through conduit 34.

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We also interpret the claims "focussing optical lens means" as the specific lens design shown in Figures 1, 2 and 3 and described at Page 5, lines 6 to 14, of the specification, which is provided below for convenience:

The invention further includes a flow cell 30, shown particularly in enlarged form in Figs. 2 and 3, and in this embodiment, formed from a focussing optical lens means 32 shown as a compound lens system including solid focussing lens 33, typically made of glass, high molecular weight polymer or the like. Lens 33 is characterized by having an elongated hollow channel or fluid-flow conducting conduit 34 therein directed transversely to the optical axis of lens means 32, and comprising a tubular passage, typically of circular cross-section, through lens 33. At least a portion of such cylindrical conduit, reaction chamber 36, is disposed at the focal region 55 of lens means 32.

The examiner has rejected claims 1 through 3 and 32 through 34 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Bauman. To establish an anticipation under Section 102, the Bauman reference must disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. **See In re Spada**, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); **RCA Corp. v. Applied Digital Data Systems, Inc.**, 730 F.2d 1440, 1444, 221

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USPQ 385, 388 (Fed. Cir. 1984). As argued by appellants (Brief, pages 3-5, and Reply Brief, 1 and 2), however, the examiner has not established that the Bauman reference discloses the claimed measuring means. Nowhere does the Bauman reference describe the specific structural arrangement embodied by the claimed means for measuring an amount of radiation emanating from within the conduit. Accordingly, we cannot sustain the rejection of claims 1 through 3 and 32 through 34 under 35 U.S.C. § 102(b).

The examiner has also rejected claims 4 and 36 under 35 U.S.C. § 103 as obvious over the disclosure of Bauman. To establish obviousness under Section 103, there must be some teaching, suggestion or incentive from the Bauman reference itself and/or the knowledge of ordinary skill in the art to arrive at the claimed subject matter. **See Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.**, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996); **ACS Hospital Systems, Inc. v. Montefiore Hospital**, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). As indicated *supra*, however, the Bauman reference does not disclose the specific arrangement of

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optical devices embodied in the claimed measuring means. The examiner has not supplied any rationale as to why the Bauman reference would have rendered the claimed measuring means ***prima facie*** obvious to one of ordinary skill in the art.

Since the examiner has not carried his burden of establishing a ***prima facie*** case of obviousness, we reverse this rejection as well.

Further, the examiner has rejected claims 5 and 35 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Leif and Schrader. For the reasons set forth at pages 6 through 9 of the Brief and pages 2 through 4 of the Reply Brief, we agree with appellants that it would not have been obvious to one of ordinary skill in the art to remove an orifice in the device of Leif to provide "a conduit means having substantially uniform surface ... extending the entire length through the lens means for passage of liquid sample therethrough." To modify the device of Leif as proposed by the examiner, i.e., remove an orifice, is to destroy the invention on which Leif is based. ***See Ex parte Hartmann***, 186

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USPQ 366, 367 (Bd. App. 1974). Accordingly, we cannot sustain the rejection of claims 5 and 35 under 35 U.S.C.

§ 103 over the combined disclosures of Leif and Schrader.

In view of the foregoing, the decision of the examiner is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
BRADLEY R. GARRIS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
CHUNG K. PAK)	
Administrative Patent Judge)	

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DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):
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OB/HD GAU: 1764

PALM / ACTS 2 / BOOK
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